

UN Agency and Bonn At Odds Over Report on Treatment of Refugees

By Iain Guest

GENEVA — A major dispute has erupted between the office of the United Nations High Commissioner for Refugees and the West German government, one of the refugee agency's principal donors.

The agency has asserted that the administration of Chancellor Helmut Kohl is trying to "dissuade" people seeking asylum by deliberately neglecting conditions in transit camps and discriminating against refugees from rightist regimes.

The dispute came to a head Monday when the commissioner, Poul Hartling, abruptly canceled a two-day visit to West Germany.

Agency officials said the trip had been canceled because Interior Minister Friedrich Zimmermann had decided not to meet with Mr. Hartling.

The West German government was angered by an internal agency report, which was leaked recently, that criticized West Germany's refugee policy. The report was prepared by Candida Toscani, who heads the agency's European section, after a visit to seven refugee centers in West Germany in June.

Mrs. Toscani pointed out that the number of people seeking asylum in West Germany had fallen from 107,818 in 1980 to 37,231 in 1982 as a result of "dissuasive measures unique in Europe."

Among the principal conclusions in the report:

- Camp conditions. The report describes "broken down furniture, insufficient heating, poor sanitary facilities" and says that the basic allowance given to refugees, 55 to 70 Deutsche marks (about \$20 to \$25) a month, is "not adequate" to cover the cost of living. In one center the mission found that pork was served to a predominantly Moslem population.

- Medical care. The report charges that there have been suicides and attempted suicides among people in camps because of

"uncertainty about their future, isolation, feeling of rejection, helplessness and increasing despair." Many of the smaller centers, the report says, have no doctors.

- Work. The report says refugees can take only jobs for which no German has applied. "It was clear that there is no intention to offer training facilities to asylum seekers who are expected in principle to leave the country," it said.

The report also included Mrs. Toscani's account of a conversation with Norbert von Neiding, who heads West Germany's federal refugee agency, in which he said that West Germany is "a white society."

He is quoted as adding: "Due to the prevailing political orientation in the Federal Republic of Germany, refugees, fleeing rightist political systems are not welcome."

The agency's relations with West Germany, which contributed about \$33 million to the agency's budget last year, were badly strained when the agency intervened three times on behalf of Kemal Altun, 23, a Turkish refugee who jumped to his death from a window in West Berlin on Aug. 30. Mr. Altun had been granted asylum, but faced extradition proceedings for involvement in the murder of a politician.

The West German government has declined to attend an agency seminar in Geneva on the integration of refugees in Western Europe that is to end Thursday.

■ **Report Called Erroneous**

The West German government said Wednesday that the agency's report was full of errors. Rainer Haerdtl, a spokesman for the Interior Ministry, said at a news conference that the report was poorly researched and "unacceptable."

West Germany's laws on political asylum are "unique in the whole world," Mr. Haerdtl said and added that it was the only country with a constitution guaranteeing admittance to political refugees.



Summoned to the Foreign Ministry in Tokyo Wednesday, the Soviet ambassador, Vladimir Pavlov, rejected Japan's demand for an apology and compensation for the 28 Japanese passengers on the Korean jet that was shot down.

Soviet Instincts on 747 Were to Admit Nothing

(Continued from Page 1)

The accounts damaging to the Soviet Union that were floated in the West were the work of isolated foes of the Soviet system and not of the world at large.

The reaction in the streets suggested that most Russians hardly needed to be persuaded of the necessity of such a drastic action as shooting down the airliner. But the Kremlin still apparently found it necessary to stress again the image it has fostered of itself as a globally accepted champion of humanity and peace, opposed only by schem-

ing Western politicians and capitalists.

Thus the Kremlin has yet to tell its people about the boycott of commercial flights to Moscow or to give its people any inkling of the full scope of the indignation over the incident.

There has been no suggestion in the Soviet accounts that the downing of a civilian jet in peacetime would in itself arouse horror or that the world has condemned the action despite the mysteries surrounding the jet's wayward flight. The suggestion, rather, has been that it placed in the proper perspective of suspicion, threatened security and international law, the Russians' version would justify their actions.

The Soviet leaders evidently presumed that the rest of the world would accept its view that the Korean plane was a hostile intruder.

The interview with the pilots who downed the jet seemed intended to foster this image both for domestic and foreign audiences since the film was sold abroad even before it was shown at home. The two pilots who scrambled over Sakhalin Island both invoked the image of a hostile aircraft flying over their own homes, spying even while people slept peacefully.

The image was evidently intended to show that only the vigilance of its defenders allows the nation to sleep in peace. It was a vision that Soviet leaders could expect to play well at home, but that they willingly sent abroad, with the image of a man who had shot down a civilian airplane talking about the job as the "meaning of my life," and with all the questions it raised about the sequence of that night's events, may have been part of a misconception about the rest of the world.

U.S. Cautions Philippines

(Continued from Page 1)

version later with Mr. Aquino about the meeting with Mrs. Marcos. Mr. Aquino said that she had asked him "not to come to the Philippines," because his safety would be endangered. Mr. Maisto testified.

"She said there were individuals who would want to do him harm," said Mr. Maisto in recounting Mr. Aquino's remarks. "She said people loyal to the government could possibly do him harm."

Mr. Maisto said Mr. Aquino "didn't quite know what to make of this."

■ **Marcos Attacks Opposition**

In Manila, President Marcos attacked the opposition Wednesday for allegedly blocking the investigation of the assassination, United Press International reported.

The president asserted that his opponents have used "character assassination, propaganda, libel, threats, intimidation and demonstrations" to stymie the inquiry.

Mr. Marcos, in a statement, said it was "strange" for the opposition to obstruct the commission for clamping for a full investigation. "If it because they knew something which, if brought out in the investigation, they would not be able to handle," he asked.

Three petitions have been filed before the Supreme Court challenging the legality of the commission, forcing it to suspend hearings.

U.S. Security Agencies Said to Have Spotted Soviet Jets on the Move

By Philip Taubman

New York Times Service

WASHINGTON — U.S. intelligence agencies were aware of heightened Soviet air-defense activity off the Siberian coast an hour before a South Korean airliner was shot down in the area, according to senior intelligence officials.

However, the agencies did not understand the significance of the Soviet actions until after the airliner had been attacked, the officials said Tuesday.

The disclosure was the first time the Reagan administration has revealed that U.S. intelligence agencies were in any way aware of the events that led to the downing of the Korean plane while those events were unfolding.

Until now administration officials, when commenting on the incident, have relied on information and tape recordings of Soviet pilots provided by Japan. The existence of independent U.S. intelligence about a "struck" head-on collision, officials said, to protect U.S. intelligence sources and methods.

They added that the U.S. intelligence community completely supported the version of events presented by President Ronald Reagan and other senior officials.

The officials provided details about the intelligence information in response to questions on the condition that they not be identified.

The Korean airliner, a Boeing 747 jumbo jet carrying 269 people, was shot down by a Soviet jet fighter on Sept. 1 after it entered into Soviet airspace on a flight from Alaska to Seoul.

Intelligence officials said highly sensitive U.S. monitoring equipment detected a sudden increase in Soviet air-defense activity over the Kamchatka Peninsula and the Sea of Okhotsk in the early morning hours of Sept. 1. The activity included stepped-up radar surveillance followed by the dispatch of several interceptor aircraft.

The officials said the intelligence technicians were unaware of the flight path of the Korean airliner and concluded that the unusual Soviet actions were part of an air-defense exercise.

"They had no way of knowing at the time that a commercial airliner had entered Soviet airspace and was the object of the maneuvers," one official said.

However, the officials said, even if sufficient information had been obtained and analyzed in time to warn the Korean airliner, it would have been difficult to do so.

The officials said the intelligence

agency primarily involved, the National Security Agency, which monitors worldwide communications, had no mechanism for quickly transferring intelligence information to civilian aviation authorities.

They said that except in clear emergencies, senior officials with the authority to notify other agencies might not learn about intelligence information until hours after it was first collected in the field.

The officials declined to specify how the agency learned of the Soviet air-defense maneuvers.

One specific bit of information collected by the United States, the officials said, showed that at one point a Soviet SA-2 surface-to-air missile unit on the Kamchatka Peninsula was ordered to track a target, which was identified by the Soviet Union as a U.S. RC-135 reconnaissance plane.

Little was made of the information, the officials said, because a check disclosed that the only RC-135 operating in the area that night was headed back to its base in the Aleutian Islands and had passed no closer than 50 miles (80 kilometers) to Soviet airspace.

■ **Soviet Pilots Criticized**

Soviet pilots failed to identify the Korean 747 as a civilian plane because of their poor handling of interception techniques, General Goro Takeda, retired chairman of the Joint Staff Council of the Japanese Defense Agency said Wednesday, Reuters reported from Tokyo.

■ **Moscow to Admit Athletes**

The Soviet Embassy issued visas Wednesday for 28 South Korean athletes to participate in an international wrestling championship in the Soviet Union on Sept. 22, United Press International reported from Tokyo, citing the Kyodo News Service.

■ **Reagan Assails Moscow**

Mr. Reagan renewed his rhetorical assault on Moscow on Wednesday, calling the Soviet government "a brutal regime" and saying the airliner incident should reinforce the commitment of the United States and its allies to a strong defense, Reuters reported from Washington.

"We cannot permit such a regime to militarily dominate this planet," Mr. Reagan said in remarks to Hispanic, labor and religious editors who were at the White House for general briefings. "This incident should reaffirm our commitment and that of our allies to rebuild our defensive strength."

French Budget Limits Spending, Adds Surtax

By Paul Lewis

New York Times Service

PARIS — The French government imposed Wednesday a surcharge of up to 8 percent on high-income taxpayers, increased other taxes and social security charges and said the country faced another year of austerity.

The moves, contained in the proposed 1984 budget approved by the cabinet Wednesday, are designed to hold the deficit on government spending to 3 percent of the economy's expected output and to carry out President Francois Mitterrand's commitment to close France's trade deficit by the end of next year and cut the inflation rate from 9 percent to 5 percent.

Under the new budget, government spending will increase by only 6.8 percent in 1984, the smallest increase in 13 years.

The new budget thus continues the president's attempt to rescue France from an economic crisis caused in part by an expansionist Socialist economic policy designed to force down unemployment. This caused an increase in inflation, a huge trade gap and three devaluations of the franc.

"The aim is to carry on the improvement in public finances we began last year as quickly and humanely as possible," Finance Minister Jacques Delors said Wednesday at a press conference.

He said 1984 was "a crucial year" for the French economy. "We must show the credibility of our policies," he said.

The measures announced Wednesday weigh heavily on the better-off classes and appear to be a victory for Prime Minister Pierre Mauroy and the left of the party over Mr. Delors, who is known to fear that high tax rates imposed by the Socialists are discouraging initiative.

France was already the sixth most heavily taxed country in the Western industrial world last year, according to the Organization for Economic Co-operation and Development. The government takes 43.7 percent of the economy's output as measured by the gross na-

tional product in taxes and social security payments. This compares with about 31 percent in the United States and 37 percent in West Germany.

Only Sweden, Norway, the Netherlands, Denmark and Belgium were more heavily taxed.

This year, total tax revenues in France are expected to reach 45 percent of gross national product. In 1984, officials say, it will probably be about 46 percent.

As details of the new tax increases began to leak out during the last few days, opposition politicians and leaders of the business community protested that the Socialists were penalizing the most productive sections of the community on whom hopes of economic recovery rest.

The draft budget's main feature is a surcharge next year on taxpayers who owe more than 20,000 francs (\$2,500) in income tax.

The surcharge is 5 percent of the total tax due for those paying between 20,000 francs and 30,000 francs, rising to 8 percent for those paying more.

The new surcharge, which is only expected to affect the top 10 percent of income-tax payers, replaces this year's milder 7-percent surcharge, levied on that portion of a taxpayer's bill that exceeds 28,000 francs.

In addition, the "exceptional" 1-percent surcharge applied to all income-tax bills this year will be maintained in 1984. Social security charges are also going up next year. Inheritance taxes are being increased and certain income tax deductions will be lowered.

On the other hand, the Socialists agreed to exempt "work tools" from their new wealth tax on fortunes of more than 3.4 million francs.

The new ruling effectively means that the wealth tax will not be levied on privately owned shops, businesses and industry and represents a major concession to the business community. Art, forests and stocks of wine have already been exempted.

WORLD BRIEFS

Deputy Says He Is Acting for Begin

JERUSALEM (UPI) — Deputy Prime Minister David Levy said Wednesday he was acting as the prime minister of Israel in place of Menachem Begin, who is ill and about to leave office.

"The prime minister does not feel well, that is not a secret," said Mr. Levy, 45, who unsuccessfully challenged Foreign Minister Yitzhak Shamir to be the ruling coalition's choice to succeed Mr. Begin.

Mr. Levy said authority was transferred to him to act as prime minister under Israeli law. The law states that when a prime minister is unable to fulfill his duties or is outside the country, the deputy prime minister fills in for him.

Mr. Begin, 70, announced Aug. 28 that he intended to resign, but illness apparently has prevented him from going to President Chaim Herzog with his letter of resignation.

Mr. Begin has not left his home in a week. Earlier Wednesday, his spokesman, Uri Porat, said Mr. Begin was exhausted but was feeling better and could emerge from seclusion by the end of the week.

■ **McNamara Calls Nuclear Arms Useless**

WASHINGTON (WP) — Robert S. McNamara, a former U.S. secretary of defense, said in an article published Wednesday that nuclear weapons "serve no military purpose whatsoever" and should not be an element of the North Atlantic Treaty Organization's defense.

He said he had told Presidents John F. Kennedy and Lyndon B. Johnson that nuclear arms were "totally useless" and that both had agreed never to initiate their use. "I know of nobody in Foreign Affairs. At a news conference at the Arms Control Association, Mr. McNamara said the United States should not launch nuclear weapons in response to a nuclear attack until the motives and extent of the enemy's action were clear.

■ **Director Says Soviet Threatened Him**

BOLOGNA (AP) — Yuri Lyubimov, Moscow's top director of experimental theater, arrived here from London on Wednesday and said he was waiting to hear from Moscow about the future of his theater.

Mr. Lyubimov, 65, here to direct a play, confirmed he had not asked for asylum in Britain. In an interview aired Tuesday by the British Broadcasting Corp., he said he had been threatened by an official of the Soviet Embassy who was angered by his criticism of Kremlin interference in the arts.

He told Italian reporters, "I made precise requests to authorities of my country" and "I am waiting for their response."

In the BBC interview he said he had told Soviet authorities that if he was not allowed to stage plays the way he wanted, "too bad — I won't work."

■ **U.S. Ambassador to Britain to Resign**

LONDON (AP) — U.S. Ambassador John J. Louis Jr., a millionaire businessman and fund-raiser for the Republican Party, announced Wednesday that he would leave the post this fall.

Mr. Louis, who had served for two and a half years, said in a statement that he would return to business, civic education and charitable work in the United States. He did not say who would succeed him, but embassy sources said Charles H. Price, the ambassador to Belgium, had been chosen by President Ronald Reagan.

Mr. Louis' announcement followed a report by a Daily Mail gossip columnist, Nigel Dempster, that he was being replaced as ambassador because he had been so "lacking in impact" that he had been dubbed "the invisible man."

■ **Spain Dismisses High-Ranking Officer**

MADRID (Reuters) — The Spanish government dismissed a high-ranking general Wednesday after he had urged pardons for officers jailed for their part in a 1981 coup attempt.

Eduardo Sotillos, a government spokesman, said the weekly cabinet meeting decided to replace Lieutenant General Fernando Soteras, commander of the northwestern sector military region. General Soteras, 63, had been quoted in the weekly *Interviú* as saying that the coup plotters were gentlemen with patriotic motives. "Most of the army would be very pleased to see those comrades released," he said.

Mr. Sotillos said those "unauthorized remarks" were the reason for the general's dismissal.

General Soteras was the latest and most senior officer to join a campaign started in June by the extreme rightist newspaper *El Alcázar*. Seven officers have been sanctioned for writing letters urging clemency for the plotters. Twenty-nine military officers were jailed for the coup attempt, when parliament was stormed by troops.

■ **Jackson Apologizes for Citing Queen**

AMSTERDAM (AP) — The Rev. Jesse L. Jackson apologized Wednesday for "any error of judgment or interpretation" in having disclosed what he said were Queen Beatrix's personal thoughts on NATO's planned missile deployment.

In a Tuesday interview with *The Associated Press*, the American civil rights leader said the Dutch queen had told him during a private audience that "she wanted Geneva [arms control negotiations] either to succeed or [the deployment] to be delayed." Mr. Jackson's comments touched off a political commotion in Dutch government circles and were denied by a government spokesman.

The queen's comments as related by Mr. Jackson ran counter to Dutch government policy on the cruise and Pershing-2 missiles, as well as the Dutch Constitution, which bars public policy pronouncements by the monarch.

■ **Bush Praises Algeria's Nonalignment**

ALGIERS (AP) — U.S. Vice President George Bush praised Algeria's policy of nonalignment Wednesday but took a hard line on Communist influence in the developing world.

"Many governments that call themselves nonaligned are remarkably myopic in recognizing what Communism does to human rights wherever it takes hold," Mr. Bush said in a speech to 100 high-ranking Algerian officials. The message apparently was meant for the three East-bloc countries — Yugoslavia, Hungary and Romania — that Mr. Bush will visit after Tunisia, the next and last stop on his tour of North Africa.

Apparently referring to frequent Third World criticism of U.S. policy, Mr. Bush pointed out that "objectivity and balance require equal care in observing the faults of the East."

■ **Belgian Civil Servants Plan Walkout**

BRUSSELS (AP) — Belgium's 900,000 civil servants plan to strike Thursday and Friday in protest against a government austerity plan that could cut their incomes by more than 8 billion Belgian francs (\$148 million) next year. On Wednesday, the powerful Christian and Socialist unions ordered the general strike in all public services.

The strike has grown out of a social protest that began last Friday when railroad workers in two southern urban centers walked out. The protest, workers and public agents throughout the country have joined in. Urban transport, post and telephone workers joined in, disrupting communications and economic life in Belgium, and some schools closed.

The prime minister, Wilfried Martens, is recovering from a heart operation, but other officials met with trade union leaders to discuss the government's new austerity plan. Representatives of the civil servants did not appear for the meeting and the government asked to meet them on Friday.

Soviet Rules Out Arms Concessions

(Continued from Page 1)

ing that a change in the Soviet position on this issue could "clear the way to an agreement," but he added that it was necessary "to wait and see whether this is a breakthrough."

Mr. Kornienko said Mr. Genscher had been "not quite accurate" in the way he relayed Mr. Gromyko's remarks to the press. The Soviet position, he said, was that it did not matter what the French and British weapon systems were called as long as they were

included in Western totals in the negotiations.

Mr. Kornienko said Mr. Genscher's "impression" that Moscow might forgo its insistence on the inclusion of French and British missiles was "what we call in Russian wishful thinking."

Western diplomats noted that the Bonn government had taken a lead in seeking ways to promote a compromise at the Geneva talks because of pressure from groups campaigning against the scheduled deployment of U.S. cruise and Pershing-2 missiles beginning in December.

One of the possible solutions that has been explored by West German officials is the idea that French and British systems be considered in the broader context of the strategic arms talks also taking place in Geneva.

Asked whether it might help to merge the two sets of negotiations, Mr. Kornienko said he saw no point in this as the U.S. attitude in both sets of talks was "negative."

The Soviet minister did not rule out the possibility of combining the two negotiations over the long term. The idea has recently gained favor among some missile experts in Western Europe as a way of avoiding the confusion over different types of nuclear weapons.

Mr. Kornienko said there were indications that the U.S. side was attempting to use the plane incident to create problems at the Geneva negotiations. He cited a statement last week by Paul H. Nitze, the chief U.S. negotiator, that the talks "cannot but be overshadowed by what happened to the plane."

The tone and thrust of Mr. Kornienko's press conference, which was an unusual event by Moscow standards, was interpreted as a signal to the White House not to try to take advantage of the Soviet Union's diplomatic isolation.

Official Soviet figures for the

balance of intermediate forces in Europe were provided by the deputy chief of the general staff, Marshal Sergei Akhromeyev, who appeared at the press conference with Mr. Kornienko.

He said the North Atlantic Treaty Organization had 857 medium-range nuclear delivery vehicles in Europe made up of bombers and land- and sea-based missiles. He put the Soviet total at 938 units made up of SS-20 missiles, SS-4s and bombers.

Marshal Akhromeyev acknowledged that the Soviet Union had a superiority in missiles but said this was offset by the NATO superiority in bombers. He said NATO had one and a half times as many warheads as the Soviet Union.

The United States has argued against including the bombers in the negotiations on intermediate-range weapons on the ground that the issue is too complex and that the Soviet total is much larger than has been acknowledged.

■ **Letter From Reagan**

President Ronald Reagan has written Prime Minister Bettino Craxi of Italy that he is still firmly committed to reaching a nuclear arms control agreement with the Soviet Union despite the "brutal" Soviet downing of the airliner, The Associated Press reported from Rome.

■ **U.S. Stand Reaffirmed**

The White House reaffirmed Wednesday the U.S. negotiating posture at the Geneva talks on intermediate-range nuclear missiles, United Press International reported from Washington.

"We continue an active pursuit at Geneva of arms reductions," said Larry M. Speakes, the deputy White House press secretary. "And our delegation is going forward with an amount of flexibility to listen to any serious Soviet proposals."

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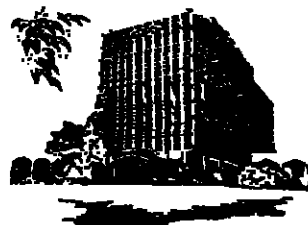
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United, Citing Life Rafts, Restricts Flights of 747s

United Press International

CHICAGO — United Airlines is barring Boeing 747s from flying over water because of problems discovered with emergency life rafts, the airlines said Wednesday.

"The rafts did not remain inflated over an extended period of time," said James J. Hartigan, airline president. "As a result we made a decision to withhold the 747s from over-water flying."

BRIEFS

Acting for Begin
Prime Minister David Ben-Gurion is expected to leave office, well, that is not a secret, said Foreign Minister Yitzhak Mordechai to a group of reporters. When a prime minister is asked to resign, the deputy prime minister is expected to resign, too, he said. Earlier Wednesday, Begin was expected to resign by the end of the week.

Nuclear Arms Under
S. McNamara, a former U.S. secretary of defense, said in a "whatsoever" and should not be "totally useless," and that he "knows of nobody that knows of a secret nuclear arms program." McNamara said in an article in Foreign Arms Control Association, which would not launch nuclear war, he motives and extent of the

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1983 NEW JERSEY STATE CONVENTION

Senator John Glenn speaks to the delegates at the New Jersey Democratic convention.

Glenn Tops Field in New Jersey Straw Poll

ATLANTIC CITY, New Jersey — Senator John Glenn of Ohio has won New Jersey's non-binding Democratic straw poll, defeating former Vice President Walter F. Mondale and the rest of the Democratic field in a contest largely ignored by the candidates.

Mr. Glenn, benefiting from a personal appearance at the state Democratic convention Tuesday morning, gave his presidential campaign a boost by winning 432, or 38 percent, of the 1,125 votes cast. Mr. Mondale, who chose not to contest the straw vote, received 317, or 28 percent.

The "uncommitted" line on the ballot drew 294 votes, or 26 percent, after some delegates mounted a campaign to send a message that they were not impressed with any of the announced candidates.

Among other announced candidates, Senator Gary Hart of Colorado received 41, or 4 percent; Senator Ernest F. Hollings of South Carolina, who made a last-minute appearance at the convention

Study Calls for 'Exemplary' Schools In U.S., Specializing in Math, Science

By Gene L. Macoff
New York Times Service

WASHINGTON — A panel appointed by the National Science Foundation has urged the creation of a network of "exemplary" schools specializing in mathematics and science.

The report by the Commission on Precollege Education in Mathematics, Science and Technology said Tuesday that "sweeping and dramatic changes" are essential for upgrading mathematics and science education in public schools. It called for the creation of special schools, 1,000 at the elementary level and 1,000 at the secondary level, to be launched mainly with U.S. funds.

Proposed changes also involve preparing elementary school children earlier for mathematics and science; expanding high school enrollments in the two subjects, re-

U.S. Agency Aide Allegedly Ignored Pesticide Threat

New York Times Service

WASHINGTON — The chairman of a House panel has charged that the director of the Occupational Safety and Health Administration ignored his staff's advice in declining to take emergency action to protect workers from the pesticide ethylene dibromide.

The pesticide has been described by scientists as a potent cancer-causing agent in test animals. More than 100,000 U.S. workers are exposed to the pesticide, according to Representative George Miller, a California Democrat who is chairman of the Labor Standards Subcommittee of the House Education and Labor Committee.

Thorne G. Auchter, assistant secretary of occupational safety and health, whose agency regulates health and safety in the workplace, told the panel Tuesday that he had rejected a petition to set an emergency standard to protect workers from ethylene dibromide, or EDB, because there was insufficient evidence that workers were being dangerously exposed.

But Mr. Miller produced a memorandum from Frank A. White, the agency's solicitor, that explained in detail how an emergency standard to control the pesticide could be justified in a court of law.

The congressman said that at least 108,000 workers were exposed to EDB, a colorless substance used in pesticides to fumigate certain types of fruit, vegetables and grain to prevent the spread of insects.

Americans Showing More Interest In Religious Matters, Survey Shows

Washington Post Service

WASHINGTON — A new poll reflects what the poll-taker George Gallup Jr. describes as "a rising tide of interest and involvement in religion among all levels of U.S. society."

The telephone sampling of 1,029 adults, conducted in the last week of July, indicated that six out of 10 Americans said they were more interested in religious matters than they were five years ago.

At the same time, Mr. Gallup said that only about 12 percent of the population could be classified as "highly committed" to their religious faith. The percentage of people who attend church or synagogue has remained relatively static since the end of the 1960s, with 41.5 percent currently stating that they have attended within the past seven days.

Four out of 10 adults surveyed said they had participated in one or more in a list of 10 activities such as Bible study, special prayer groups, evangelism, and speaking in tongues.

Bible study attracted the largest proportion — 26 percent, or one out of every four Americans. That figure is up from 19 percent in 1978, Mr. Gallup said. According to the study, more than one-third of Americans say their religious beliefs influence their political views to a greater extent than was the case five years ago, but 27 percent said religion's influence on their politics has decreased.

U.S. Police Try to Reduce Fear of Urban Crime

Authorities Use 'Scarecrow Effect' to Improve Poor Reputations of Neighborhoods

By Howard Kurtz
Washington Post Service

WASHINGTON — When Captain Pete Sarna of the Oakland, California, police department looked around his downtown business district two years ago, he saw "a lot of flophouses, a lot of panhandlers, a lot of addicts, a lot of prostitutes" — in short, an urban landscape guaranteed to scare away potential new businesses.

But in an unusual experiment, the police, city officials and Oakland developers are working together to reduce the fear of crime, partly by erasing the signs of decay that reinforce the impression of a dangerous and undesirable neighborhood.

Apparently impressed with the results of Oakland's efforts, the U.S. Justice Department's National Institute of Justice is spending more than \$2 million on similar projects in Houston and Newark, New Jersey, to determine whether the concept will work elsewhere.

Although Oakland put more police officers on the street, the federal experiments do not involve more policemen and are not attempting to reduce what officials call "hard" crime. Instead, said James K. Stewart, director of the justice institute, they are aimed at public perceptions that are not justified by crime statistics.

"People don't decide that some place is a high-crime area because they see robberies in progress or autos being stolen," said Mr. Stewart, a former chief of detectives in Oakland. "It's because they see graffiti, broken windows, panhandlers, overt prostitution, loitering and gambling on street corners."

But critics say a better solution would be to reduce break-ins and assaults.

"We've taken a fair amount of heat on this from people who say it sounds like PR," said Lawrence W. Sherman of the Police Foundation, which is running the Justice Department project. "The accusation is that we're Dr. Feelgood, that we're telling people they shouldn't be afraid of crime when crime is a terrible problem."

Captain Sarna said he faced the same difficulties when Oakland developers complained that downtown workers, especially women, were being hassled on the street by beggars and teen-agers. Local businesses agreed to contribute \$400,000 a year, which helped Captain Sarna increase the number of officers on foot patrol from 12 to 30 and buy horses for a small mounted patrol.

Since then, Captain Sarna said, downtown burglaries and assaults have declined by as much as 30 percent. Prostitutes are plying their trade elsewhere and several hotels that housed mostly welfare recipients have shut down. The streets are cleaner, broken windows have been repaired and there are fewer panhandlers on the street.

"You get an immediate deterrent impact — I call it the scarecrow effect," Captain Sarna said. "The cop is out there questioning people, talking to teen-agers, solving problems, getting street people into a facility. It's reassuring; people love to see cops."

Captain Sarna has encouraged commuters to report street incidents on index cards distributed to local offices, and he has urged architects to design buildings without obstructed entrances and alleys, which are often used by muggers.

"We were faced with more of a perception problem than a crime problem," said Bill Bodrug, vice president of Bramalea Ltd., an Oakland developer that is a major contributor to the police patrols. "We just signed IBM to a major lease, and they wouldn't have come if we didn't have this program in place."

In both Newark and Houston, certain city services will be concentrated in four neighborhoods and compared with a fifth area that will receive no special effort.

The Newark police plan to set up

A New Look For U.S. Army: Dress Earrings

The Associated Press

WASHINGTON — The U.S. Army, responding to the demands of its women, has decided that they may wear earrings in uniform.

But the earrings must be conservative — spherical, no larger than a quarter of an inch in diameter and made of gold, silver or pearls. In addition, the army said, they "must fit snugly against the ear."

The earrings can be worn only with the dress or service green uniforms, meaning that none of the army's 75,000 women can wear them with combat fatigues.

The decision brings the army into line with the navy and air force, whose women have been allowed to wear similar jewelry for several years.

U.S. Still Studying Rule On Seat Belts, Air Bags

United Press International

WASHINGTON — The Reagan administration will move with "all deliberate speed" to determine whether to require air bags or automatic seat belts in new automobiles, according to Diane Steed, deputy administrator of the National Highway Traffic Safety Administration.

The administration has tried to revoke the Carter administration's requirement that cars be equipped with air bags or automatic seat belts. The Supreme Court ruled in June that the government's action in seeking to repeal the rule was "arbitrary and capricious."

Fire at Bangkok IBM Office

The Associated Press

BANGKOK — Fire swept four floors of the International Business Machines Corp. building here Wednesday night, causing an estimated \$13 million in damage to computer equipment, police and company officials said.

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Guatemalan Defector Says Military Is Corrupt

U.S. Plays Down Captain's Account Of Army's Killing of Project Worker

By Philip Taubman

WASHINGTON — Carrying two Guatemalan passports, a bundle of papers that he says document corruption in the Guatemalan military and a small satchel of clothes, Captain Erwin Guerra Morales fled his army and his country the last week in June.

He knew then only that his life had been threatened by the military and that sanctuary was waiting with his relatives in the United States. Blocked by security agents from flying out of the Guatemala City airport, Captain Guerra flew across the border to Mexico on a private plane piloted by a friend and made his way to Miami by way of Mexico City.

Thus began an odyssey that has brought him into the middle of relations between the United States and Guatemala and focused attention on the chronic human rights problems of Central America.

In an account confirmed by U.S. officials, Captain Guerra has charged that earlier this year the Guatemalan Army murdered a Guatemalan linguist working on a U.S. education project. He also said he was present at a meeting in April when Guatemala's defense minister, General Oscar Mejia Victores, told a group of junior officers that he would ensure that a second linguist would be killed.

General Mejia Victores, who became Guatemala's head of state in a coup last month, denied the charge in an interview and said an army unit had killed the linguist, whom the general described as a communist, when he tried to escape while being questioned.

At U.S.-Mexican Border, Pollution Doesn't Stop

By Robert Reinhold

EL PASO, Texas — For much of last week, a large cement factory just across the Mexican border in Ciudad Juarez was filling the air with almost 60 tons of dust pollution a day. And as happens often, much of it drifted over this U.S. city, which has one of the worst air pollution problems in the United States.

Hundreds of miles to the west, sewage drifts from Tijuana, Mexico, to California, creating sanitation problems for San Diego.

The situations in these two regions typify problems for U.S. cities all along the 1,900-mile (3,000-kilometer) border from the lower Rio Grande valley to the Pacific coast. These cities are under pressure to clean up pollution, but the source is not entirely within their control.

Such problems led President Ronald Reagan and President Miguel de la Madrid Hurtado of Mexico to sign an agreement last month establishing a "basis for cooperation" between the United States and Mexico to protect the environment along the border. An international conference on the problems was held this week at the University of California, Los Angeles, attended by scientists and officials from both countries.

"In the case of El Paso, cement dust pollution from Ciudad Juarez comes when the Cementos de Chihuahua plant's advanced emission controls are shut down by maintenance problems or by frequent power failures. It drifts over the border to Texas.

The cross-border problems of water, air and pesticide pollution have become all the more urgent in recent months because the Mexican government has given priority to reviving the country's collapsed economy, leaving it with little ability to combat pollution.

Some U.S. border cities have been extending help to their Mexican neighbors. San Diego, for example, treats 13 million gallons (49 million liters) of sewage a day from Tijuana. Even with that help, nine million gallons of sewage is flushed untreated into the ocean daily.

Similar sewage problems affect Arizona border towns like Nogales. The lower Rio Grande valley around Brownsville, Texas, has been cited by the U.S. Environmental Protection Agency for not meeting U.S. standards for the control of dust and other air pollution.

Such problems have been building for decades. The presidential agreement, the latest of many, was greeted with some cynicism in El Paso. Agreements over the years have produced "decorous meetings and vague press releases" but little else, in the words of Howard G. Applegate of the University of Texas at El Paso. He is an authority on border pollution.

The agreement commits no money and contains no specific remedies, which are to be worked out later.

Walter Hunt, an official in the EPA's Office of International Activities, acknowledged that the going would be rough, explaining that the agreement had been reached at the insistence of the United States, not Mexico. "The Mexicans' priorities are not on the border," he said.

The pollution in Mexico City, Monterrey and Guadalajara puts to shame anything you see on the border.

Pollution travels both ways. In El Paso, for instance, the American



WAVE OF STRIKES — Argentine teachers, seeking a salary increase, demonstrate outside the presidential palace in Buenos Aires. The teachers organized a nationwide one-day strike Tuesday to protest falling income, the result of the country's high inflation rate. Law clerks, tax inspectors and police have also organized slowdowns or strikes.

of government money into private accounts.

Specifically, he says, some of those officers, after ordering him to investigate corruption on a highway construction project, took possession of automobiles that he had repossessed from other officials who had bought them with highway funds.

Captain Guerra said that after his interrogation he hid with relatives for a week before fleeing.

When he reached Miami in July, he said, he was told by a friend who works at the Miami airport that two Guatemalan Army intelligence officers were in Miami looking for him. After hiding at the home of a relative for two days, Captain Guerra flew to another U.S. city, where he is now living with relatives. Last week he applied for political asylum.

4 U.S. Groups to File Suit Over Plan To Release an Altered-Gene Microbe

By Philip J. Hils

WASHINGTON — The government has approved the first release of a gene-engineered microbe into the environment, but four organizations are expected to file a lawsuit to halt the experiment.

A board of the National Institutes of Health has approved field tests of a bacterium containing a gene that has been altered so that it prevents the formation of frost crystals on plants at temperatures as low as minus 5 centigrade (23 Fahrenheit).

Most frost damage occurs between minus 4 and minus 1 centigrade (25 and 30 Fahrenheit), so the new bacterium has an enormous commercial potential, researchers say. Agriculture Department officials said successful results could save millions of dollars in crops that would otherwise be lost to frost.

But the four organizations contend in their lawsuit that the experiment could be hazardous. In the worst case, the opponents speculate, the frost-preventing bacterium might rise into the upper atmosphere and disrupt the natural formation of ice crystals there, which could in turn affect the global climate.

Suing the government are the Humane Society of the United States, the Environmental Task Force Inc., Environmental Action Inc., and the Foundation on Economic Trends.

In the lawsuit, expected to be filed in U.S. District Court in Washington, the plaintiffs say that introducing gene-engineered bacteria into the environment is much like introducing a foreign plant into the country. "Some of our most significant problems are of that nature," the lawsuit said.

These include the kudzu weed, chestnut blight, the gypsy moth, Dutch elm disease, and starlings and house sparrows, both of which are agricultural pests.

They also contend that the National Institutes of Health board is unqualified to assess the environmental risk of such an experiment, because it has no ecologists or botanists and has failed to carry out an environmental assessment of the experiment's dangers.

The institutes offered no comment on the lawsuit Tuesday, but scientists familiar with the experiment said it would be hard to argue that it was risky, since very similar experiments with frost-stopping bacteria have already been carried out successfully and with no apparent risk. Those experiments altered the bacterium in similar ways, but by methods other than gene engineering, and so were beyond regulation by the institutes.

The experiment — to be carried out by Steven Lindow of the University of California and partly funded by Advanced Genetic Sciences, a company in Berkeley, California — was approved by the institutes under existing federal rules governing gene engineering work.

Until research was delayed recently, Mr. Lindow had planned to spray a field of potatoes this month with an altered version of the extremely common organism called *Pseudomonas syringae*. The natural organism lives on the outside of plants after they sprout, and it makes a chemical that encourages the formation of frost and ice at only slightly below freezing.

Mr. Lindow and his colleagues have identified the genes in the organism that trigger this quick-freezing action, and they have excised these genes from the bacterium. These neutered organisms are sprayed on the plants as soon as they emerge from the soil. Once the bacteria are in place, they take over the niche usually occupied by their frost-causing relations, crowding out any of the frost-causing variety before they can take hold.

Czechoslovak Fleets to West

MUNICH — A 19-year-old Czechoslovak frontier guard who said he was fed up with conditions in his homeland has fled to West Germany, the Bavarian Border Police reported Wednesday.

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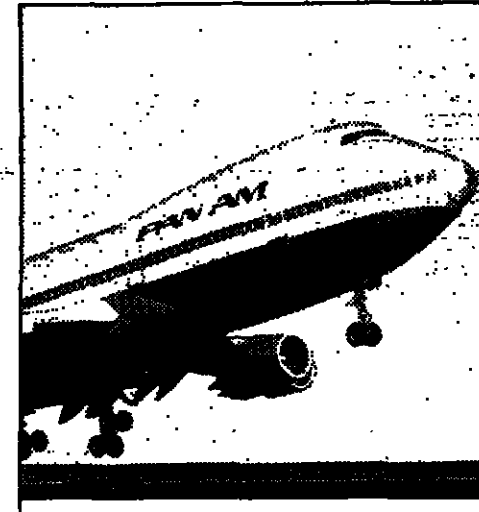
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INTERNATIONAL Herald Tribune

Published With The New York Times and The Washington Post

Crisis in Lebanon

With American peacekeeping troops being killed in Lebanon and with that country threatening to break apart, the Reagan administration faces a severe crisis.

The crisis has several parts. Mr. Reagan is moving to fulfill what must be the first policy requirement as long as the Marines remain exposed: to ensure that they have the resources and orders to defend themselves adequately. But he seems to be under no illusion that anything faintly resembling a military solution is conceivable. His evident hope is that a show of readiness to employ force as necessary will help calm down the military situation and give diplomacy a bit more time to accomplish the main thrust of American policy, to try to save Lebanon as a unified state.

The Reagan administration has come to understand that it is not enough just to strengthen the Lebanese central government. That government has to be preserved as the single available instrument of Lebanese unity and sovereignty, but it must also be induced to share political power more fairly with the non-Christian, less privileged communities that have, in Syria, a tough patron close at hand.

The Christian-dominated government of Amin Gemayel, shying from redistributing national political power, blames the latest violence primarily on international — Syrian, Palestinian, Iranian — intervention. On this basis it pleads for stronger U.S. support of its "infant army." The Reagan administration

takes stern note of the Syrian hand behind the Muslim and Druze militias currently challenging the Christian militias and the Lebanese army. However, making a crucial and necessary distinction, Mr. Reagan calls the battling a "civil war" that it is Beirut's responsibility to handle, militarily and politically.

Certainly it would have been better to start serious internal talks before the Druze overcame Christian Phalangist fighters and bloodied the Lebanese army in the Chuf area just evacuated by Israel. But the premise of the diplomacy being conducted by American and Saudi envoys, among others, is that there is still some time. Israel, too, has a role: discreetly, to keep Syria from directly entering the fray.

Congress has been rightly concerned that American policy be prudent and that the War Powers Act be respected. On policy there is a substantial majority that either supports the president's measured approach or chooses not to take responsibility for hemming him in. That consensus seems to be permitting a mutually satisfactory War Powers formula to be worked out. No president likes Congress to inhibit his foreign policy. But if the peace-maker's best efforts fail, Mr. Reagan could yet be glad he had congressional company.

If the worst happens and Lebanon slides toward dissolution, America will need a new policy. That will be the time to reconsider the U.S. role, including the role of the Marines.

—THE WASHINGTON POST.

Illegal Immigration

Hey, bud, you want some fake identification? It's not hard to find. In Texas one former provided whole ID packets, including Social Security card and birth certificate, for \$75.

If that is all an illegal alien needs to stay in the United States, no wonder there are so many of them. Indeed, there is such a wave of false papers that some people now suggest surrendering to the illegal tide.

Sure, they say, Congress may finally be on the verge of passing the big Simpson-Mazzoli immigration reform bill that is meant to put the United States back in control of its borders. But with all the forgeries, the argument goes, it can't work, so what's the use?

It is an infuriating attitude, so defeatist as to be suspect. Tax evasion is increasing as more and more cash changes hands in the underground economy. Does that mean the Internal Revenue Service should stop trying to enforce Title 26 of the U.S. Code? More people have been running red lights in New York City. Does that mean the police should stop giving out tickets? Of course not.

To suggest that the United States should surrender to illegal immigration suggests a defeatism motivated by special, selfish interest. On immigration there is plenty of that, ranging from growers who want cheap labor to Hispanic organizations that want easy entry.

If the United States is serious about controlling its borders, the Simpson-Mazzoli bill — already passed overwhelmingly by the Senate — is an essential starting point. There is no measure before the new session of Congress that more deserves public attention or prompt enactment by the House of Representatives.

Other Opinion

Syria, Gemayel, U.S. Marines

President Reagan's decision to authorize Marine Corps commanders to summon aerial and naval artillery support for the Lebanese army if needed is an extension of the U.S. military role. He apparently relied in favor of his diplomats [and against the Pentagon] on the belief that it was important at this point to give Syria a clear warning that the United States does not intend to give up its peace mission in Lebanon. He is also said to feel that failure to meet President Gemayel's request would harm U.S. interests in the Arab world by making the United States look like an unreliable partner.

—Henri Pierre in Le Monde (Paris).

Begin with the contradictions enveloping international peacekeeping forces in Beirut. Add a bunch of other foreign troops intent on anything but peacekeeping. Stir in legacies of vengeance and fratricide. Season the whole mess with brave words from the Reagan administration: dilute it with the administration's indistinct purposes. Bring the mixture to a boil and you have the recipe for Lebanon.

Many of the troops in Beirut must wonder, as other Americans do, whether the mission serves any purpose by being there. We think they do. Were they to pull out, the Lebanon cauldron would almost surely boil over.

—The Minneapolis Tribune.

The only question arising from a partition of Lebanon, which has now irreversibly taken

place, is whether it is total or partial. Maronite, where the Maronites live, is a self-contained and homogeneous entity, but what about the patchwork of communities [in] the Chuf, where no one is for long supreme?

Enemies though they are, Israel and Syria have a mutual interest in Lebanon thrust upon them, and one which they tacitly recognize. They have a common interest that the multinational brigade from far overseas. They have clients in Lebanon. And since Israel had enough, and Syria is left as the only country with both the will and the means to get its way, a Syrian hegemony over Lebanon now looks almost unavoidable, with the Maronites existing on terms — which need by no means be desirous, given their own power to disrupt things — as the Syrians are willing to grant.

—The Guardian (London).

Syria has its own hegemonial ambitions in Lebanon. [so] the opportunity to achieve saving political change may no longer exist. That possibility sharpens the question of what the marines are supposed to be doing. Certainly they were not sent simply to prop up the fortunes of the Gemayel family, or to assure that the Maronite minority can regain its old political dominance. The marines and others in the multinational force were put in Lebanon to support Lebanese efforts to put a fragmented country back together again. Those efforts have barely begun.

—The Los Angeles Times.

War Powers: Invoke Them for Lebanon

By Stanley Karnow

WASHINGTON — An American presence as part of the multinational force in Lebanon is absolutely vital to prevent the situation in that beleaguered land from degenerating into chaos. For that reason President Reagan ought to seek approval from Congress to maintain the U.S. Marines there.

Such a move would give legitimacy to the American role in the Middle East, thereby strengthening U.S. diplomatic efforts to find peace.

Mr. Reagan is reluctant to go to Capitol Hill, evidently because he fears a noisy confrontation with legislators demanding that the marines be withdrawn before they suffer further casualties. But the available evidence suggests that Congress would underwrite a continuation of the American troop deployment in Lebanon. Its members feel, however, that they should be called upon under the War Powers Act of 1973 to authorize the deployments.

Under that act a president must obtain congressional endorsement to maintain U.S. forces in "hostilities" for more than 90 days. Mr. Reagan and his advisers are somehow persuaded that the president would be shamed if they turned to Congress, so they are trying to convey the notion that the marines, who are being killed and wounded, are not in a hostile environment.

That approach seems to me to be beside the point. The real issue is whether the policy of responsibility in the Middle East has American public support. By asking Congress to back him, Mr. Reagan would in effect be mobilizing the country behind his policy — and in that way averting later recrimination.

The president and his staff are plainly haunted by the ghosts of Vietnam, convinced as they appear to be that Congress is unalterably opposed to any troop presence overseas. They seem to be misreading the mood on Capitol Hill.

What eventually antagonized Congress during the Vietnam War was precisely the fact that Lyndon Johnson escalated the conflict almost surreptitiously. Congressmen felt that they had been betrayed, and they turned against the war.

Using a dubious attack against American destroyers in the Tonkin Gulf in August 1964, Mr. Johnson got Congress to hand him a blank check to commit forces as he pleased in Southeast Asia.

The so-called Tonkin Gulf resolution, Mr. Johnson said at the time, was a simple precaution. He pledged repeatedly during the fall of 1964 that he had no intention of sending American forces into action abroad.

Only afterward did Congress wake up to discover that it had been suckered. Its bitterness was to lead some of its members, most notably Senator Jacob Javits of New York, to promote the War Powers Act as a curb on the president's authority to become involved in a conflict.

The law was never meant to block American intervention overseas. Its purpose was simply to restrain the executive branch from unbridled military ventures. In that respect it was completely consistent with the spirit of the Constitution.

In 1787 the framers of the Constitution devised a flexible formula regarding the pursuit of war. They designated the president to be commander in chief in order to assure civilian control over the military, but they vested the power to declare

war in Congress. Thomas Jefferson observed that the authority to unleash the "dog of war" had been shifted "from those who are to spend to those who are to pay."

That interpretation of the Constitution was strictly observed in the early years of the republic, but it faded not long afterward. Ulysses Grant acted on his own when he tried to annex the Dominican Republic, as did Woodrow Wilson when he sent U.S. forces to Mexico.

Harry Truman similarly sidestepped Congress when he intervened in the Korean War, calling the move a "police action."

If the marines quit Lebanon it would spell the collapse of the fragile government there. But if American forces are to remain, their presence must be credibly accepted by the public at home.

Tribune and Register Syndicate.

Grand Debate? Lebanon Can't Wait

By Philip Geyelin

WASHINGTON — In front of millions of television viewers, a U.S. Marine has explained from his Beirut bunker that he could return fire without permission "only if my life is in danger." But marines in Beirut have been regularly shelled. The last toll: at least four killed and many more wounded.

Yet the Reagan administration refuses to see it as "hostilities or situations where imminent involvement in hostilities is clearly indicated." Why? Because this would involve invoking the War Powers Act and giving Congress the piece of the action that the act provides.

Small wonder that Congress should have returned to work all around up for a great constitutional debate on the war-making powers in general and on their applicability to Lebanon in particular.

The Reagan administration's as-

sorted status reports in recent days have contributed more to distrust at home, and to possible miscalculation abroad, than the law ought to allow. That is not to mention what is at stake for the immediate conduct of sound diplomacy, or the urgent obligation owed to the American forces on the ground.

So later will be soon enough for a great debate — for a judicious review by congressional committees of exactly what the Supreme Court ruling on congressional vetoes has done to veto powers over the president's right to commit American troops to foreign lands. Meanwhile, Lebanon can't wait.

If Ronald Reagan cannot bring himself to forgo the semantic flim-flam over "hostilities," his policy

and objectives should be put to a clear congressional test.

The recommended instrument is at hand: a resolution offered this week by Senator Charles Mathias, Republican of Maryland, which would bring the executive branch into compliance with the War Powers Act by acknowledging the self-evident "hostilities." The present law then requires congressional authorization to continue a deployment beyond 90 days.

The Mathias version would start the 60-day limit on Aug. 31, and give the president an additional 120 days — which is to say, a relatively free hand until the end of next April. Now you can argue about that time frame, given the awful unpredictability of the Lebanese situation and the intractability of the multiple disputes and conflicting interests involved. But the approach is sound.

Some version of the Mathias resolution would almost certainly pass: there is precious little inclination in Congress to take responsibility for sabotaging the multinational peacekeeping force by withdrawing the U.S. component.

A congressional vote of confidence for a reasonable period would remove some of the misapprehensions growing out of the U.S. government's current disarray — uncertainties that play directly into the hands of those forces in Lebanon that would profit the most from the destabilizing effect of removal of the international peacekeepers.

It would reduce the incentive (all but acknowledged by the opponents of President Amin Gemayel) to shoot at the marines and the other peacekeepers by way of building political pressure for their removal.

It would also remove the premium on presidential double-talk. The point is not that the president or his advisers have to be infallible. On the contrary, it is precisely because they cannot predict all the implications of what they are doing that they need congressional reinforcement. It should be firm enough to convey American resolve. But there is no harm in its being relatively limited in its duration.

Substantial political concessions are going to have to be extracted from the Lebanese government. It should not be offered open-ended, unqualified support.

The Washington Post.



It's between Arabs and Phalangists, sorry. That was a bank shot.

Options for Europe: Untried Merger or Unforeseen Decadence

By Michel Albert

PARIS — To understand the challenge facing Europe, one first has to get a grasp of the stakes involved. A superficial view of the EC countries' economies focuses on short-term differences between West Germany and Britain on the one hand and France and Italy on the other.

The former group is seen as having more or less won the fight against inflation, whereas in the latter countries the healing process is said to be only in its first stages.

Moreover, a lot of people imagine that Europe is going to be able to hitch a ride on the back of the American recovery, and thus return to a reasonable level of economic growth.

Both notions are ill-founded. The EC countries are today incapable of climbing back to growth levels similar to that of the United States.

Behind short-term country-to-country differences there lurks a much deeper, shared characteristic: the economic decline of the whole of Western Europe. Over the long term — say, from 1970 through 1990 — the process appears startling.

Two of the many danger signals: Jobs in Europe have been drying up like water in a desert. Whereas in the last 20 years the total number of jobs in the United States has risen by 32 million — from 73 to 105 million — net job creation in Europe has actually been negative, with a slight drop from 105 to 104 million.

Secondly, although the prevailing wisdom has it that the worst hit industries in Western Europe are the traditional ones — shipbuilding, textiles, steel, autos — the problems in those sectors appear decidedly minor compared to Europe's eclipse in the new information technologies.

At the beginning of the present decade these industries of the future employed 5 million Europeans. If their growth were to keep pace with that of information technologies in the United States, this figure would have to rise by some 40 percent to reach 7 million by 1990. Unfortunately, the trend is the exact opposite and total employment in these key industries seems set to fall — from 5 to 3 million — during the period. The overall gap, some 4 million jobs, should set alarm bells ringing to mo-

bilize the whole Community. Because of the impotence of states, European recovery now depends more than anything else on such a rallying call.

It is a proven fact that in the medium term no EC country can henceforth achieve economic growth rates much higher than the average for the Community as a whole. Which goes to show that the "non-European" and the "un-common market" that have resulted from continual inter-governmental skirmishing condemn Europeans to collectively become "underdeveloping" countries.

To portray the dramatic effects of this backward movement, the eloquence of a Churchill is needed. "Non-Europe" leads to non-growth. The welfare state will not survive 10 more years of non-growth.

In plain terms this means that EC

citizens who now have the privilege of being treated in hospitals that are not only free but also well run and well equipped will have to get used to paying for treatment in hospitals that are less well run and less well equipped. Proportionally, the number of X-ray scanning machines in European hospitals is already five times less than in American ones.

On a deeper level, the economic decadence of Europe could threaten democracy itself.

Europeans, blissfully unaware of the sickness eating away at the foundations of their future, are also unaware that they hold in their own hands everything they need to cure it.

For all the goods and services that will make up the wave of the future, Europe offers either the biggest or the second-biggest market in the world.

If Europe wants to completely transform the growth potential of its most competitive companies, all it needs to do is break down the walls between them. Facilities for scientific and technical research are of the first order. We need only set them free from the feudal dungeons of nationalism for them to regain fertility.

West Europeans possess the most potent savings and financial system in the world, but division renders it for the most part sterile. And European efforts, it is above all the price of our own stupidity in continuing to insist on not building Europe.

The trumps we hold can still prove decisive, but not for much longer. It would not take much to swing the balance and move from decadence to recovery. The essential

problem is not technical, but rather one of collective awareness. We have not much time to kindle such awareness. The run-up to the European Parliament elections next June could serve as a test.

Such is my *pari passu* Europe (not for Europe) — a wager on the ability of Europeans to understand what problems lie in store if they do nothing — but also what enormous potential for economic growth and social progress the Community's untapped efficiency multipliers contain.

The writer, who was head of the French government planning agency during the premiership of Raymond Barre, is the author of "Un Parti pour l'Europe," published in France by Seuil last month and later to appear in English and German translations. He contributed this comment to the *International Herald Tribune*.

LETTERS TO THE EDITOR

The Unions Endure

Congratulations to Joseph Kraft ("On Labor Day, Labor Is Fighting the Bill," *IHT*, Sept. 8) for being the first columnist to underline the link between capitalist, communist and Third World governments in their common attempt to roll back unions.

The price being paid — totalitarian repression, high unemployment, social misery and political tension — is high indeed. Two thoughts strike me. Firstly, the period of high economic growth, roughly from 1950 to 1970, coincided with a time when unions were strong and recognized as responsible partners. The growth of anti-union hostility matches the col-

lapse in world economic development. Secondly, as events in such diverse countries as Brazil, Poland, Chile and South Africa show, workers still look to unions as the major hope not just for economic fair play but for social justice as well.

Unions may be battered and bruised right now, but they will still be around when General Jaruzelski, President Reagan and the presidents of the big banks are dead and buried.

HERMAN REBHAN, General Secretary, International Metalworkers' Federation, Geneva.

Who Threatens Whom

Regarding "A Moscow View of Soviet-U.S. Difficulties" (*IHT*, Aug. 17) from Vladimir Alexeev:

Mr. Alexeev should stick to what he and Novosti Press Agency know best: feeding propaganda to Soviet readers. The Soviet Union poses a threat not only to the United States but to all non-communist countries. A fundamental premise of Marxist-

Leninist philosophy is to make the world a communist society by one means or another.

MILVIA STOKES, Brussels.

Dressed Chadian Heads

Regarding a photograph (*IHT*, Aug. 13) of Chadians wearing face wrappings:

Your caption writer should have his or her head "wrapped in bandages." Obviously he or she has never seen Chadian soldiers with their protective Saharan headwraps.

H. MUZA, Aix-en-Provence, France.

On Will on Jackson

Regarding "On the Death of Senator Jackson" (*IHT*, Sept. 8):

With regard to George Will on silly people, heroes and Senator Henry Jackson, I would prefer to believe all that Mr. Will writes about Scoop Jackson, but I will reserve judgment until I read his eulogy on another of his heroes, Ronald Reagan.

Mr. Will is capable of eloquent

ignorance — a trait he shares with Mr. Reagan. He has demonstrated this in his attacks on Jane Fonda over nuclear power plants.

ANDREW KLEMER, Thonon-les-Bains, France.

The Dollar's Fear Rate

Regarding "The Dollar's Value" (*IHT*, Sept. 10) from Ralph Holben:

Mr. Holben argues that one should say not that the dollar is overvalued but that one expects its future value to be less than the current market value. He has a point. But it would be still better to say that the dollar is undervalued — or, in Mr. Holben's terms, that one expects it to rise. For the dollar's value is determined not only by interest rates and market conditions but also by fear of war.

The greater this fear, the greater the flight into the dollar. To bring it down from its fear rate to its economic rate, the world must be persuaded that the danger of war is receding.

LEOPOLD KOHR, Salzburg.

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SCIENCE

Altamira and the Preservation of Prehistoric Art

By John Darnton

New York Times Service

SANTILLANA DEL MAR, Spain — The polychrome paintings on the ceiling of the Altamira cave were so well preserved when they were discovered 100 years ago near this town on Spain's northern coast that few people could accept the notion that they were created by prehistoric people.

The colors were so vibrant, the animals so lifelike, that they seemed to be just three or four years old; not, as scientists now believe, about 15,000. And the artistic sensibility behind those graceful lines of bison and wild boar was too highly refined; it ran against the popularized Darwinian version of paleolithic man as a stunted savage who only hunted, ate, slept and procreated.

It took 25 years, and the discovery of similar paintings at Lascaux, in the Dordogne River valley in France, for the skepticism to lift. When it did, man's regard for his early ancestors was forever changed and Altamira was famous the world over. A little too famous for its own good, it would turn out, for the tens of thousands who came to admire this "Sistine Chapel of Quaternary Art" brought with them, unwittingly, the seeds of its destruction. Under the press of so many visitors, the ecology of the cave—its equilibrium of humidity, temperature and gases—changed and the paintings began to deteriorate.

Cracks and fissures in the cave's limestone ceiling, stable for thousands of years, began to open wide. Colors began to fade and flake. Deposits of whitish crystals began to appear.

"It was first noticed on the great deer," said Dr. Eugenio Villar, a physicist heading a team of investigators. He was referring to a 6-foot-6-inch deer, painted in red ochre, whose eye, nostril, mouth, chin and ear are engraved in the rock and outlined in black, that stands majestically at the rear, opposite the cave's entrance. "There is a fissure that runs through her neck, and it was found that on one side of it a rash of small white deposits had formed—crystalline calcium carbonate."

Calcium carbonate—limestone—is relatively soluble in water. Indeed, it is the work of ground water over many thousands of years, dissolving limestone and carrying it away, that creates such caves as Altamira in the first place. And the steady dripping of limestone-laden water leaves behind new deposits, eventually creating festoons of stalactites and stalagmites that are the glory of the world's great caves, but a death threat to the Altamira paintings.

Elsewhere in the cave other signs of decay were to be seen. The paintings, natural yellow, red or brown ochre with a mineral base of iron oxide mixed with animal fat or blood serum, were apt to dry and flake off, or simply to fade. In some places the rock base itself was deteriorating.

The Ministry of Culture, which asserts control over the cave as part of the patrimony of the Spanish state, closed Altamira in June 1977, and three years later handed it over to Dr. Villar and his team of phys-



One of the 16 bison drawn 15,000 years ago in the Altamira cave, in northern Spain.

cists, geologists and microbiologists.

They equipped the cave with barometers, thermometers and other instruments to take readings of humidity, temperature, gas levels, water and carbonates. The flow of air in and out of the cave was measured, as were industrial pollutants, carbon dioxide and the acidity of water dripping from 10 points in the cave. Video images of the paintings were stored in digital form, and as such—unlike color photographs—are essentially unchangeable by time and can be used for many years to check for alterations in the paintings.

The scientific readings, some taken every two minutes, were fed into a computer. The cave was studied in its natural state, without visitors, for a year and a half. Then limited groups were allowed in for brief periods to monitor the changes.

An American team, headed by Marvin H. Wilkening, a physics professor who is dean of the graduate school at the New Mexico Institute of Mining and Technology, was called in to help study air exchange.

"They know of our work in Carlsbad Caverns," Professor Wilkening said, "where we used studies of natural radon to act as a tracer for the mixing of outer air with cave air."

The conclusions of the study indicate that the mere presence of a large number of people had radically changed the environment, not just by raising and then lowering the temperature but by disturbing a delicate physical and chemical equilibrium that had existed for millennia. It changed the chemical composition of the water that seeps naturally into the cave through sev-

eral yards of rock and that is otherwise almost completely pure as it bathes the paintings.

"Just consider that one person expels 50 grams of water in one hour," said Dr. Villar. "That same person gives off 17 liters of carbon dioxide. These two act upon the natural water in such a way that it either dissolves the pigments and the rock itself or it condenses, leaving crystals behind."

Not least of the mysteries of Altamira is why, for 15,000 years, no calcium carbonate crystals had formed in the small chamber containing the paintings, even in the long period before people began visiting them.

At Carlsbad, Professor Wilkening said, the moisture problem had been just the opposite—the caverns were drying out because of the human presence, and stalactites and stalagmites were ceasing to grow; hence the importance of the radon studies. Radon, a radioactive gas formed when minute quantities of radium naturally present in the rocks decay spontaneously, accumulates in the atmosphere of a closed cave. If radon levels drop, that is a sign air is penetrating from the outside.

The elevators installed at Carlsbad to take tourists in and out were found to be major culprits there, Professor Wilkening said, pumping dry surface air into the cave during the New Mexico summers, and damp cave air out. "In that case, the first thing that needed to be done, and was done, was reduce the artificial exchange of air, especially in the summer," he said.

Radon findings at Altamira will form part of Dr. Villar's report, which has not yet been released. But the technical data have been collected and analyzed. Now, Dr. Villar faces the most sensitive as-

would produce no negative effects at all," explained Dr. Villar. "We have to be as careful as architects who allow for a margin of error in designing a building so that there is no chance that it will fall."

The cave of Altamira runs deep in Spanish lore. The story of its discovery, revealed in 1879, is a favorite of schoolchildren, undoubtedly because the hero is a 9-year-old girl, Maria Sanz de Sautola. Exploring the cave with her father, Marcelino Sanz de Sautola, she was the first to enter the Hall of the Bison. "Look, Daddy, bull!" is the phrase legend attributes to her.

Most of the 16 bison are so powerfully drawn they seem about to leap across the ceiling. The lines are perfect, from the hairy hump to the sinews of the back legs, the single darkened eye, the dewlap, the horns. Some are painted to conform to the cavities and protrusions of the limestone rock, which give them muscles and hollows.

The ministry's decision on the visits to the cave is keenly awaited here, where actions by the authorities in Madrid are usually regarded through a filter of suspicion. The big ochre-red bison, reproduced on scores of tourist brochures, was a powerful lure and helped to fill the hotels of Santander, the provincial capital an hour's drive away.

The specter of Lascaux, where prehistoric paintings discovered in 1940 were closed to tourists by the French government in 1963 to preserve them, hovers over Altamira. This year the French opened a painstakingly created replica, a Lascaux II, next to the original and it has begun drawing people back to the nearby town of Montignac.

But Spaniards find it difficult to work up enthusiasm for a similar project here. "This cave belongs to humanity, to all of us," said one member of the investigating team. "We can't close it down. What good is it if it remains there and we can't see the real thing?"

"We sought the number that

CURRENTS

Studies Link Shyness and Genes

ANAHEIM, California (UPI)—About two-fifths of all Americans consider themselves shy and about half of them may have inherited the trait, new studies indicate.

"Shyness may be a personality trait with a substantial genetic component," Jonathan Cheek of Wellesley College, Massachusetts, told a meeting of the American Psychological Association convention. He discussed a Harvard University study of babies 21 to 48 months old in which about half the toddlers developed high heart rates when shown new stimuli such as unfamiliar people or different toys. He also said that once a shy person gets beyond the difficult first interaction, he may do as well and even better as the more assertive person.

Success of In-Vitro Births Problematic

LONDON (UPI)—A team of Australian doctors reported that the technique of producing test-tube babies was improving so rapidly that "the probability of pregnancy with this method has approached and may surpass the natural rate in human beings."

In an article in the medical weekly *The Lancet*, the doctors also reported that multiple pregnancies were 10 times more likely to occur than in normal births because of the improved techniques of transferring embryos from test tube to patients. The doctors suggested that no matter how many embryos were produced in the in-vitro fertilization, it seemed advisable to restrict implants to two for health reasons. However, they said the disposal of the unused embryos raises serious ethical problems.

Factor Isolated in Diabetic Blindness

BOSTON (UPI)—Extremely high levels of a hormone have been found in the blood of diabetics with an eye condition called retinopathy, a discovery that could lead to earlier treatment and help diabetics who lose their eyesight, doctors reported in the *New England Journal of Medicine*.

A team of doctors said that seven patients with severe diabetic eye complications had levels of IGF-1, a growth hormone that spurs cell growth and multiplication, averaging nearly 100 percent higher than other diabetics or members of a healthy control group.

"Finding very elevated levels of the hormone may be useful in selecting patients with an extremely poor prognosis for vision and giving them more vigorous therapy or an alternative form of treatment quicker," said Dr. Thomas Merimee of the University of Florida in Gainesville.

'Biological Marker' in Alcoholism

LOS ANGELES (AP)—A study by American and Danish researchers suggests that the children of alcoholics are particularly sensitive to the effects of alcohol because of genetically transmitted changes in the brain and central nervous system. The findings, published in *Archives of General Psychiatry*, show that children of heavy drinkers have a "biological marker" in their central nervous systems that indicates a higher risk of their becoming alcoholics.

Researchers studied 48 Danish men aged 19 to 21, 31 of whom had alcoholic fathers. Differences were found in brain-wave response between the sons of alcoholic fathers and other children, after both groups were given a low dose of alcohol, though there were no differences in blood-alcohol levels. None of the subjects tested was an alcoholic himself.

It would be nice if everything that flies received as much attention as a Lufthansa plane.



Face to Face With Philip of Macedon

By Kerin Hope

The Associated Press

ATHENS — After studying a skull fragment found in a 2,300-year-old royal tomb in northern Greece, three British experts have reconstructed what they believe is the battle-scarred face of King Philip II of Macedon, father of Alexander the Great.

Their portrait of a tawny-haired, ancient Greek warrior with a broad, scarred face was presented last week to an international conference attended by more than 1,200 classical scholars.

"We don't claim this is a 100 percent likeness, but we think it's as close as you can get to how King Philip looked shortly before his death," Dr. John Prag, keeper of archaeology at Manchester Museum, said in an interview.

A medical artist from Manchester University applied forensic techniques to rebuild the skull from buried bones found in 1977 in a solid gold funerary casket in the tomb.

"This is scientific confirmation of my conviction that King Philip was the occupant of Tomb 2 at Vergina," said Professor Manolis Andronikos, the Salonika University archaeologist who excavated the tomb.

The artist, Richard Neave, took plaster casts of the skull pieces that were used as the basis for the reconstruction.

"They revealed bone damage to the right eye socket and cheekbone caused some time before death," Mr. Neave said.

According to ancient historians,



Philip II of Macedon, as he may have looked, according to British researchers.

Philip II's right eye was gouged out by an arrow while he was besieging the northern Greek city of Methoni in 334 B.C., 18 years before his death.

"The bone damage was compatible with a wound caused by a missile striking from above," Mr. Neave said.

The artist rebuilt the soft tissue of the face in clay, using standard proportions established for depth of facial tissue, and produced a wax cast, made up in southern European skin and hair tones.

"It's not the serene idealized ancient portrait of a great king, but what Alexander the Great's father might have looked like after a day's hunting," Dr. Prag said.

Philip II was assassinated in the theater at Aigai, capital of the Macedonian royal family, at his daughter's wedding feast in 336 B.C.

The new research was expected to convince scholars who still doubt the stone chamber unearthed beneath a 30-foot-high earth mound and crammed with gold, silver and ivory finds, was really Philip II's last resting place.

Professor Andronikos is convinced the village of Vergina was once Aigai. In recent years he has uncovered other monumental tombs, an ancient theater and an inscribed statue base erected by Philip II's mother.

"Excavations have revealed part of the city layout, showing how it was possible for an assassin to get close and stab Philip as he entered the theater and then slip away," Professor Andronikos said.

Experts date pottery found in the tomb to between 340 and 300 B.C. Some archaeologists claim Philip II's nephew, Philip Arridaeos, who was buried in 316 B.C., was his occupant.

"But Philip Arridaeos, the historians tell us, was sickly and mentally deficient," Dr. Prag pointed out. "Nobody records that he was ever in battle or received an eye wound."

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STYLE

Aldredge Transforms Men Into 'Showgirls'

By Sherry Romeo
International Herald Tribune

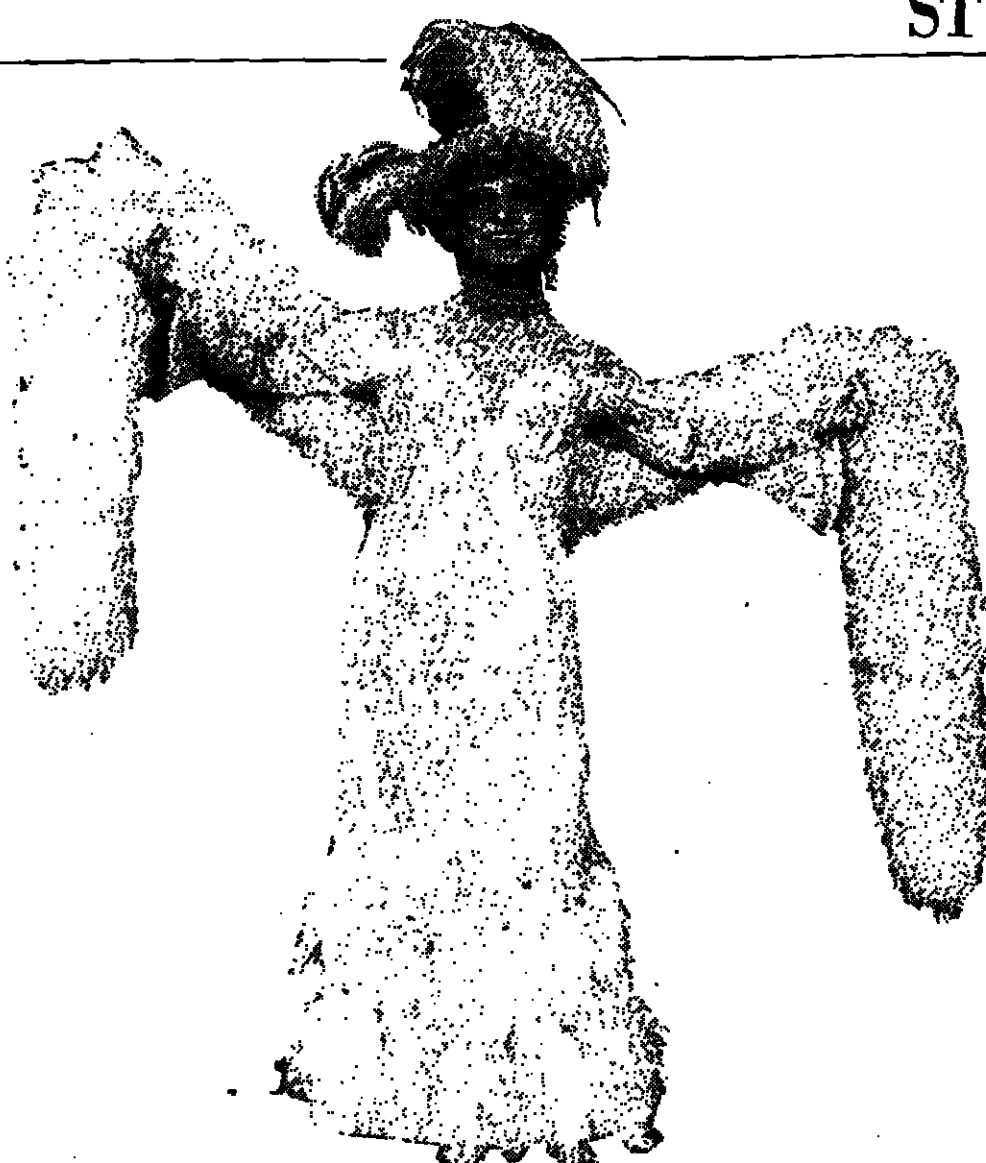
"La Cage aux Folles" was the longest-running show in the history of Paris theater. In English and with music added, it is on its way to repeating this phenomenal success on Broadway, where it had ticket sales of more than \$4 million even before it opened last month. Each evening, audiences are transported to the exotic transvestite night club, La Cage aux Folles, by Theoni V. Aldredge's spectacular costumes, which create the illusion that men are exquisite showgirls.

Aldredge transformed muscular male dancers into voluptuous female dancers during a months-long process that began with the designing of everything from dresses to jewelry to shoes on a larger scale. "After all, men's shoes don't come in size 14 high-heels," points out Aldredge, who estimates that she designed more than 1,000 pairs of shoes.

By the time every last bead was hand-sewn onto the extravagant gowns and the accessories perfectly coordinated and sized, the costume budget for the musical was \$800,000.

It wasn't enough simply to make things bigger. Male anatomy created other problems. First, Aldredge had to give the men "bosoms," as she delicately put it. Falsies are the conventional solution, but since there are only 30 seconds for some costume changes, the designer's ingenious idea was to build the chest into the costume.

How to make men's legs and bodies look feminine required a great deal of experimentation. A convincing effect was finally achieved with a combination of three pairs of stockings — one for support and one for color on the legs. A third layer, a body stocking, conceals hair on arms, legs and chests so the men do not have to shave their entire bodies each night. "It's terrible on the skin, as well as a bore, to have to shave your face close enough every night to wear makeup, let alone your entire body," says Aldredge.



For one number in the Broadway musical adaptation of "La Cage aux Folles," George Hearn wears an elaborate gown decorated with nine pounds of beads.

Designing the costumes for "La Cage aux Folles," starring George Hearn and Gene Barry, brought a surprising insight as well. "We girls have the reputation of dressing for show, but in nature it's the males who have the plumage," says the designer, who draped feathers, furs and beads by the pound on her "girls." In the process of these transformations she discovered that Hearn, who plays the male role of Albin as well as Zaza, the aging transvestite star at the St. Tropez nightclub, "has gorgeous legs. He looks fabulous in a pair of Chanel slippers."

Another discovery: "Put makeup on men and they're beautiful!" Aldredge recounts an emotional moment when one of the dancers first saw his "female" face in a mirror. "He freaked out and said: 'Oh, my God, it's my mother!' Eventually, all the men overcame their shock.

"Now they can't put on enough makeup," the designer adds with a laugh.

Aldredge no longer considers herself a costume designer. "I'm too spoiled and extremely rich by now. There was a time when designers went to their corners and did what the director wanted, but I'm a collaborator. I have input in everything." But then again, she never was your average struggling designer.

The first show Aldredge did was Tennessee Williams' "Sweet Bird of Youth," starring Marlon Brando and Geraldine Page. "I asked myself then, 'Where can I go from here?'" she remembers. The answer to that question reads like a history of theater. Her credits include costumes for 160 shows, television specials, films, opera and ballet along with "every award

there is to win," from the Academy Award for "The Great Gatsby" to Tony Awards for "Annie" and "Barbra." At the moment, four other Broadway shows feature her costumes — "42nd Street," "A Chorus Line," "Merlin," and "Dreamgirls."

Aldredge, who seems shy but warms up as she speaks, allows that there is "a wonderful line in the show" that describes her: "Here in La Cage we live life on an angle." When everything around her is going crazy, "her idea of therapy is to sew," says one of her design assistants.

The Greek-born Aldredge has been married since 1953 to an actor, Tom Aldredge. They met when they were students at the Goodman School of the Art Institute of Chicago. They have no children, but Aldredge says she feels that the entire cast of La Cage is her family.

Fashionable Teenagers Are Terence Conran's Latest Design Challenge

By Jean Rafferty
International Herald Tribune

The distinctive flair that made Habitat an international byword for a certain clean design, became a widely copied lifestyle and revolutionized household furnishings has cast its eloquent spell over the metamorphosis of Mothercare, the giant 400-shop maternity and children's wear group that Habitat bought 20 months ago in a Jonah-eats-the-whale acquisition.

Mothercare's image was described as "dull, but worthy" by Habitat's designer and founder, Sir Terence Conran. More outspoken critics termed it "cheap, common and nasty."

His most inspired innovation out of this expansion: five "test" teenage fashion shops — called Now — to open Oct. 1. Under Mothercare management, but with separate identity (the London shop is next door to Mothercare's Hammer-smith branch), the Now shops are destined for ages 11 to 17.

Conran's two youngest children, Ned, 12, and Sophie, 17, "are in the target group and very clothes conscious." He describes the styling of the Now fashions as "energetic, sporty... on the model of the French New Man look."

As for Mothercare, the reorganization is well underway with this fall's \$9-million revamp of 43 of the 207 British shops.

"We're making it bright, cheerful and optimistic, while keeping the competitive prices," Conran said.

The spruce-up is most perceptible in the larger stores — London's Marble Arch branch, for example, where the new decor stresses soft "sweet-pea" colors instead of dreary orange, brown and cream.

In the United States shops, the new look is confined so far to two prototype shops in White Plains and Rockaway, New York.

Sir Terence — he got his knight-hood in the queen's last New Year's Honor list — may be president of a \$430-million multinational corporation, but the pleasures of toycondom have not diminished the noted Conran design alchemy.

The revamp of Mothercare is an exemplary lesson in how to use design, and a startling affirmation of Raymond Loewy's credo that good design sells. After the first Conran back-to-school promotion

last year, sales shot up 37 percent and this year's sales for the same period rose an additional 30 percent.

Mothercare had no designers; buyers worked directly with textile industry stylists. Conran installed a team of 90 designers headed by John Stephenson, group design and marketing director and a Conran colleague for 25 years.

Though Conran maintains that Mothercare is not being "Habitatized," a new line of baby foods — available from this month in the 26 largest stores, and containing only natural ingredients — have a distinct Habitat flavor. One picture of the yogurt *musli* dished up in a pine Habitat kitchen.

"We're using some Habitat ideas relevant to children," says Conran. "But the rest will be new and exciting."

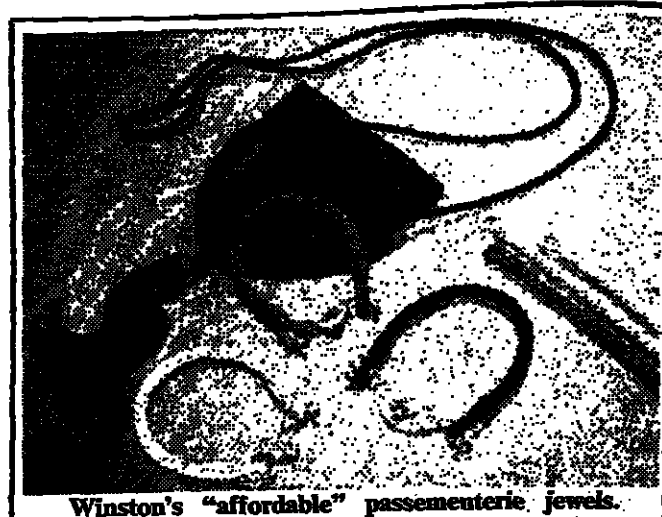
The trick will be to lure back the more affluent shopper — "Dare I use the word 'middle class'?" asks Stephenson — the sort, Conran says, that shopped at Mothercare in the early '70s, "when the image was about right and everyone came to buy much in the same way they went to Marks and Spencer."

Mothercare and Now prices will be "fractionally" below those of their major competitor, Marks and Spencer. We will "face them head-on in value for money," Conran said, "but with more thrilling design."

"We've moved toward natural fibers where they are appropriate," says Stephenson. "People are very hypocritical. They want natural fibers, but they also want to throw everything into the machine. We are looking closely at our blends — to get a decent feel, yet keep them easily washable."

Some up-market customers are still left cold by the new catalog. "Coming to charge for it — it makes you want it more," says a British magazine editor, as yet unpersuaded to shop at Mothercare.

Others were more impressed by a visit to the redesigned store. "Habitat with clothes," says one shopper. Another, a mother of three under-10s, who hadn't set foot in Mothercare for years, was complimentary: "Conran is doing for children's clothes what he's done for furniture."



Winston's "affordable" passementerie jewels.

Ronald Winston Wants The 'Lost Generation'

By Barbara MacLaurin
International Herald Tribune

"So many people grew up not knowing us because our average price was a quarter of a million dollars," mused Ronald Winston, heir to the legend of Harry Winston and his spectacularly expensive jewelry collections. "We lost a whole generation of 30-year-olds that could afford jewels that cost \$25,000."

Harry Winston had so firmly established his reputation as jeweler to the super-rich that many potential clients were afraid to venture beyond the shop's locked doors. Now, one need not be a millionaire to buy a little something from Harry Winston Inc. The founder's son has created a line of "affordable" jewels priced from \$2,500 to \$3,000.

Instead of masses of expensive stones around the neck, an interchangeable, braided silk cord in red, blue, grey or white holds a few small diamonds and cabochon rubies, emeralds or sapphires mounted in 18-karat gold. "I wanted to create something that was very chic and yet easy to wear day and night," Winston said.

On a recent vacation in the south of France, Ronald Winston, who for security reasons never allows his photograph to be taken, talked as freely and proudly about "his" passementerie jewelry as his father might have about the 125-carat Jonker diamond or the 75.52-carat "Star of Independence" he cut.

On one subject, however, he was not as expansive: the \$60-million lawsuit brought against Harry Winston Inc., in which Phyllis McGuire charged the jeweler with substituting synthetic stones for \$9 million in gems she took to the company for cleaning and repair. Winston countersued the singer for \$100 million for placing a "mal-

icious newspaper ad to intimidate and harass." According to McGuire's attorney, Melvin Bell, the case is being settled out of court and "all parties are peaceful temporarily."

Harry Winston was known to have great trust in the integrity of his clients, allowing them to leave his shop with \$1 million worth of jewels without asking for a receipt or a deposit, just so they could get "the feel" of the stones. And his passion for diamonds made him what many considered the most daring dealer in the world. He is also credited with discovering a hitherto untapped source of beautiful gems — estate sales, where he found stones that, recut and reset, suddenly looked appealingly contemporary.

Although his son is expanding the jeweler's customer base, Harry Winston was always happy with the "most expensive" image he created, a perception that remains intact. One client recently purchased a necklace featuring two 35-carat diamonds — one pink, the other blue — for more than \$10 million. Another wanted a sapphire necklace but each time he was presented with a sketch he thought the stone was too small. When it was finally large enough he bought the piece for \$6 million. Winston's general manager, Albano Bochatty, told the man that he hoped his wife liked the gift.

"Oh, it's not for my wife, it's for my 5-year-old daughter — but she won't wear it until she's 10," the man explained.

This little girl was not the youngest benefactress of such conspicuous consumption, however. Another customer bought his daughter two multimillion-dollar diamond tiaras. She received the first on her third birthday, the second on her sixth.

"I think most people who buy beautiful jewels are fascinated with the glitter and the hardness; there's something very sensual about precious stones on warm skin," Ronald Winston said. "I even know women who take their jewels out at night and play with them. I think it's a very primitive impulse."

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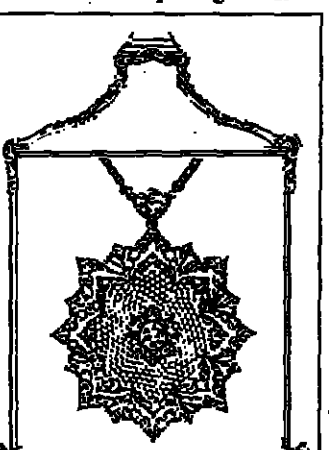
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AUTO INDUSTRY

A SPECIAL REPORT

THURSDAY, SEPTEMBER 15, 1983

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New from Mercedes Benz, the 190E compact.



New cars leave the Volkswagen plant in Wolfsburg, West Germany.

Transition Time: Challenges, Choices For World Industry

By Arthur M. Spinella

DETROIT — In a recent interview, the Tokyo-based international trade analyst J. Jonathan Bergman summarized the state of the world auto industry: "We have suffered an industrial Normandy, confronted an automotive Armageddon; and we will not know of our survival for a dozen years."

Mr. Bergman called 1983 "the year of transition, a portal to the future far different from the past."

The last four years have indeed altered the face, posture and makeup of the industry worldwide. And regardless of 1983 sales increases, the prospects remain cloudy because of new directions automakers must take to meet challenges and conditions that four years ago were anticipated, but not expected to occur until late in the century. These include:

- Automobile markets in the United States, Europe and Japan became saturated far more quickly than any auto company expected because prices increased at a rate outstripping growth of disposable income.
- The situation in Latin America, which 18 months ago was considered the most promising region for medium-term auto sales in the coming decade, has deteriorated severely.
- The world's automakers now see the Asia-Pacific area as potentially the most lucrative new market and are scrambling to forge deals with the region's governments to produce vehicles.
- Joint production plans are effectively reducing the number of manufacturers in the world; they are also adding tension to international politics as national pride is piqued and laws must be examined or rewritten to accommodate these new entities.
- Labor unrest is expected to increase as unskilled labor is rapidly replaced by more militant skilled workers throughout the industry.

While all these conditions were expected at some time, the worldwide recession and economic turmoil forced the industry to confront these and other challenges sooner than anticipated.

Many of these concerns are being addressed by the world's top automobile executives. Meanwhile, however, this last year's slightly improving performance, while gratifying, was hardly a significant enough improvement to justify widespread joy.

Worldwide production of cars, trucks and buses is expected to hit 39 million units in 1983, up from 37 million last year but still shy of the 42-million record set in 1978.

Even worse, production capacities remained underutilized, most notably in the United States, where only 54.2 percent of plant capacity was in use last year. Internationally, the only countries with worse performances were Argentina and Britain.

The West Germans and Japanese were able to keep production above 95 percent, partly because of strong export markets such as the United States and partly because of currency exchange rates that were decidedly tilted in their favor.

The most glamorous of the medium- to long-term markets is the region ringing the South China Sea. The Asia-Pacific area is believed to be likely to reach an automotive boom of proportions not seen since the 1960s in the United States.

The region has 405 million people and an annual economic growth rate in excess of 5 percent. Sales projections are for eight million vehicles by 1990 — up a million and a half from last year. And this excludes China, with its billion-plus population.

Furthermore, automobile industry executives and analysts anticipate that, by 1990, Asia-Pacific nations will be able to produce more than 13.5 million vehicles. Since the region will not be able to absorb all the cars and trucks manufactured, exports will become a key ingredient in the political plan. Export areas targeted include North America and Southern Europe initially, and later South America.

Japan is easily the dominant force in Asia-Pacific, but newly industrialized nations are out for a piece of its hide. In Taiwan, for example, Toyota Motor Co. has been drawn into a \$550-million investment deal to assemble 300,000 compacts a year by the end of the decade.

Mitsubishi Motors and the Malaysian government have reached a deal to build 80,000 cars a year by 1989. Indonesia is consolidating its 20 assorted assembly plants — one of which is owned by General Motors Corp. and produces Toyotas — into six.

But the main country playing King Kong to Japan's Godzilla is South Korea. General Motors owns 50 percent of one truck manufacturer there, and the government is building a new plant for Hyundai Motors Ltd. to produce an updated, more sophisticated version of its Pony compact for export to North America.

Taiwan, with one eye on Japan, the other on South Korea and China in the back of its mind, has struck a deal with Nissan Motor Co., Ford Motor Co. and Toyota to produce more than 500,000 vehicles a year, even though the domestic market will be hard-pressed to absorb half that number by the end of the decade.

The sleeper in Asia-Pacific is Indonesia, with 150 million people and a wealth of oil and iron ore.

One of Indonesia's partners in the Association of Southeast Asian Nations, Malaysia, is pro-Japanese. Its prime minister, Mahatir bin Mohamad, said last year that his country must look to Japan for guidance in international trade if it is to become a significant economic power.

ASEAN, whose other members are Singapore, the Philippines and Thailand, plans to have individual countries produce specific automotive parts in order to gain an efficiency that no one of the five countries could accomplish.

In Australia, automobiles made by Japanese companies took almost 45 percent of sales last year. The Japanese now ship some Australian-built cars to Europe in order to circumvent strict import quotas on Japanese vehicles.

The most vocal anti-Japanese stand in the United States was taken by Ford during the U.S. International Trade Commission hearings on quotas that led to the 1981 agreement for Japan to limit passenger-car exports to the United States. Ironically, in Australia and in the Asia-Pacific region much of Ford's success is based on its joint ventures with Toyota, GM, and Mazda.

Last year, Ford edged past GM in Australian sales, primarily because it now distributes Mazdas there. The GLC, bearing the Ford oval logo and a Laser nameplate, is also credited with putting Ford ahead of GM in Australia. And the Ford name is on the Mazda 626 as well.

Total sales of Ford's TK line in the Asia-Pacific region: 300,000 units, which means Ford outsells TK's own versions of the GLC and the 626 in the region, excluding Japan.

On a more distant sales horizon, last year the auto industry discovered China, with its billion people and labor costs of 60 cents an hour. China's agreement this year with American Motors Corp. puts it not only in the Asia-Pacific market but potentially into Europe because of AMC's ties with Renault. China is also discussing a joint automobile venture with Volkswagen.

As in the United States, the European market has reached an estimated 90-percent saturation level, with replacement vehicles now the primary source of sales. But the projected sales growth rate in Europe remains higher than in the United States for both the short and medium term.

Automotive experts agree that the most significant growth in Europe will come in the southern nations, as the middle class continues to grow and eventually moves away from the no-frills automobile that is now such a large part of the market.

Production as well is beginning to shift from north to south, a trend exemplified by British figures: Britain registered a record sales quarter earlier this year, but at the same time its automobile production rate was the lowest in eight years.

Internationalization of the European automobile companies has moved from foreign intruders such as GM, Ford and Chrysler to joint ventures including the Peugeot-Renault-Volvo alliance and such Euro-Japanese deals as those between B.L. Ltd. and Honda Motor Co., and between Nissan and Alfa Romeo S.p.A.

In the forefront of the recession-induced competition to increase control of the European market is a GM-Ford battle reminiscent of the Chevy-Ford sales competition in the United States 20 years ago.

GM entered the subcompact fray for the first time with its Spanish-built Corsa, and, to even its surprise, found a major market. Ford, trying to set itself apart and ahead, took a bold step with the aero-styled Sierra and briefly moved into first place in Europe, ahead of Renault. (The feat did, however, require costly consumer incentives, such as rebates.)

The next 12 months will show this battle between Ford and GM heating up substantially. GM, for example, plans a continuously variable transmission to gain a marketing edge, hoping this will sell Europeans on

(Continued on Page 115)

Bonn Measures on Fuel Certain to Increase European Prices

Special to the IHT

BONN — Starting Jan. 1, 1986, the only cars West Germans will be allowed to buy will cost more, go slower and burn more gasoline than today's models. But the class of '86 will be cleaner.

Identifying the automobile as a prime cause of air pollution, the Bonn government has given the motor industry two and a half years to come up with cars fitted with catalytic exhaust gas filters and requiring unleaded gasoline.

Nobody objects to cleaner cars, in principle. But the decision, steered through the cabinet by Interior Minister Friedrich Zimmermann, has been attacked as hasty by every major West German car firm. They, like the French and Italians, would prefer to wait for unified European standards.

West Germany is now the only European Community country with firm plans to enforce lead-free fuel. The move has surprised the automobile industry and sparked fears that the European car market could be seriously disrupted.

The industry says costs will rise unacceptably, jobs could be lost and the benefits of the proposed technology are questionable. Manufacturers will suffer, they contend, from having to divide production between lead-free markets and elsewhere.

The decision affects all new cars registered after the 1986 deadline. List prices will rise by up to 1,500 Deutsche marks, reflecting the cost of the catalytic converter.

Among the arguments against the move are that unleaded fuel cuts engine power and costs more, and that cars will use more of it; that checks on the converters' efficiency will inflate maintenance bills; and that since the price of the converters, which sharply cut emission levels of hydrocarbons, carbon monoxide and nitrous oxide, varies little according to model size, small-car buyers will be penalized disproportionately.

The technology itself presents no problems, as European firms have long experience in the lead-free U.S. market. But the motor industry feels that the cabinet move does not allow enough time to retrofit production lines. Ford Werke's technical director, Gerhard Hartwig, says that 1986 is wholly unrealistic, that five years would be more appropriate.

Mr. Zimmermann believes motorists are ready to pay to clean up the air they have long polluted. He also believes that West Germany, Europe's biggest car

producer and the Continent's most important market, can persuade other countries to follow suit.

He may be right. Although the EC awaits commission proposals on introducing lead-free gasoline, Austria, which is not an EC member, last month had ordered restrictions similar to Bonn's, also starting in 1986, and had decided earlier to offer unleaded gasoline to meet the needs of West German tourists.

Except France and Italy, other EC states — as well as Switzerland and some Scandinavian countries — favor lead-free gasoline, although none has made firm plans to introduce it.

The president of West Germany's Automobile Industry Association, Horst Backmann, warned that a blow to West German sales by major French and Italian automakers — whose small cars would be most affected by the higher prices — could bring retaliation against West German exporters.

They have a lot to lose. West German automakers export 60 percent of their output, mainly in Europe. Karl-Heinz Briam, a board member at Volkswagen, has warned of disruption to the domestic car market. He forecast a sales boom, with buyers rushing to beat the deadline, then a long slump that could cost many jobs in the auto sector and related industries.

The gasoline market could also be in for disruption. Although unleaded normal grade fuel is easy to produce, super grade is more difficult and would require heavy investment.

EC environment ministers agreed in June to require further reductions — the fourth in 10 years — in auto exhaust emissions. Automakers so far have concentrated on cutting fuel consumption, but lead-free gasoline could virtually wipe out recent gains. Opel forecasts a 10-percent rise in consumption with unleaded fuel, increasing the overall level of gas emissions pumped into the air.

Ford warns that the platinum and associated metals used to coat the honeycomb ceramic filters in the catalytic converters come from the Soviet Union and South Africa, which could pose supply problems. Ford also points out that the converters lose efficiency at the high speeds favored by West German drivers.

While the West German auto industry has pledged 10 million DM to share research costs on unleaded gasoline with the government, skepticism remains high. Volkswagen Chairman Carl Hahn said recently: "We believe we should continue with our present course, which benefits consumers as well as the environment."

Alfa-Nissan: Air of Optimism

By Robert Wazek

ROME — For Alfa Romeo, the deal provided an influx of fresh capital and Japanese efficiency. For Nissan, it was a chance to increase its European market presence in the face of trade barriers. For Naples, it offered the prospect of new jobs.

Three years after a joint-venture agreement was signed between Alfa Romeo and Nissan on Oct. 9, 1980, all these promises are on the way to being fulfilled. The turnaround at Alfa has been dramatic, with the company now predicting that next year it will register its first profit in more than a decade, in part because of the Nissan agreement.

Jobs have been created — although not as many as originally hoped — at Alfa's Pomigliano d'Arco plant in Naples and at the new \$42-million Pratola Serra assembly plant that the two companies built at nearby Avellino. And Nissan anticipates selling 21,000 cars annually in Europe — all outside Italy.

Alfa and Nissan are ready to release their new cars, almost exactly on schedule, but the question remains whether a weak European car market is ready for them.

This month, Nissan is introducing its Datsun Cherry Europe model in Britain. In October, Alfa will unveil its Arna (for Alfa Romeo Nissan Autoveicoli) in Frankfurt. The two cars, which are virtually identical, will eventually come in three different models ranging in size from 1,200cc to 1,500cc. This will put them between the upper levels of the small-car market and the lower levels of the medium-car market. Price and final specifications for the models have not been released.

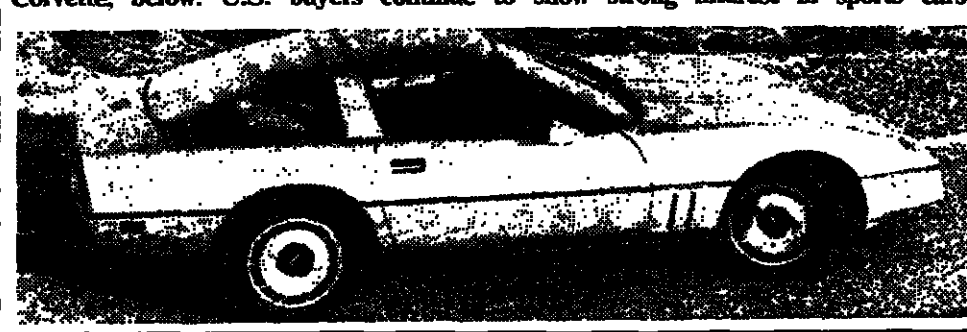
The two companies together hope to sell 18,000 cars during the last three months of this year and 60,000 annually for the duration of the 10-year, 50-50 joint venture agreement. Franco Perugina, a spokesman for Alfa, said, however, that whether the 60,000 level would be reached would depend upon "prevailing market conditions," and these are notoriously difficult to predict. For the moment, Alfa is not making any forecasts for next year.

Under the agreement, Alfa is to try to sell 30,000 Arnas in Italy and 9,000 in the rest of Europe. For the short term, the Arna will be sold only in Italy and West Germany, with market trials in other countries as conditions become favorable. Nissan will market

(Continued on Following Page)



TWO FROM DETROIT — Pontiac's new two-seater Fiero, above, and Chevrolet's Corvette, below. U.S. buyers continue to show strong interest in sports cars.



U.S. Recovery Strong, but Stiff Japanese Competition Feared

By Edward Lapham

DETROIT — The long-awaited U.S. automotive recovery finally arrived, and now industry executives are wondering how strong it will be. That depends on a number of factors, including Japanese imports and the strength of the U.S. economy.

The recovery has been good for car dealers. The attrition rate — the number of dealers forced out of business — has declined and, after four years of very low sales, dealers are experiencing real consumer interest. "One day the factory was beating us over the head trying to get us to take more cars," said Les Donovan, a Cadillac and Pontiac

dealer in Wichita, Kansas. "The next day we were beating them over the head trying to get more cars."

The automakers also have done well. The General Motors Corp. and the Chrysler Corp. are heading for record profit years. Chrysler has paid off its \$1.2 billion in federally guaranteed debt seven years early, is refinancing another \$4.2 billion in intermediate debt and is looking forward to paying dividends again. GM has restored dividend cuts and is averaging about \$4,500 per car in variable profit, according to a Wall Street analyst.

The Ford Motor Co., which for years subsidized its money-losing North American operations with

overseas profits, has turned the corner. Through the first half of the year, Ford averaged variable profits of about \$2,500 per automobile. Variable profit on the new Thunderbird and Cougar models are currently about \$4,000 per car, an industry expert said.

Arthur G. Davis, auto analyst for the Wall Street firm Prescott Ball & Turben Inc., believes that the recovery will last for more than a year, perhaps longer. He believes that the U.S. automotive market can grow at a 10-percent rate next year, but that the performance of the automakers will be related to whether or not the U.S. government renegotiates an agreement

limiting the number of Japanese cars imported to the United States to 1.68 million.

"The automakers must expand while the 1.68-million-unit ceiling is in place," Mr. Davis said. "If they don't do it now, they never will. Once the limitations come off in April, the Japanese will recapture the small-car market."

New car sales in the United States are expected to reach nine million this year, including imports. Through the end of August, sales by the domestic makers were 17-percent ahead of 1982, with imports taking a market share of less than 25 percent. That, however, is not due to new market strength by

GM, Ford and Chrysler. Rather, it is directly attributable to the limit on Japanese imports.

The size of the pie has grown, but the Japanese share has not been allowed to grow proportionately. The same 1.68 million units was worth nearly one-third of the U.S. market before the economic upturn. Furthermore, shortages of Japanese cars were reported by dealers in August, indicating that demand remains strong.

There are many reasons why the U.S. market recovered so quickly, and industry experts disagree on which had the greatest impact. The automakers point to the success of new products and to positive, if intangible, attitude changes on the part of the consumer.

Mr. Davis attributes the growth to a decline in the savings rate, to normal growth resulting from the U.S. economic output and, importantly, to the interest-rate subsidies offered by the automakers earlier in the year to stimulate sales in sluggish sectors, particularly the smaller domestic cars.

Interest rates fell in 1982, as did the inflation rate. But the rates could creep back up, which would affect the recovery. Mr. Davis believes that pricing policies, which include interest-rate subsidies and other market stimulants, also will have an effect on the strength and duration of the recovery.

"Detroit manufacturers have raised prices substantially and reduced low-end product lines to improve profits and pay for new plants and tooling," he said. "New car prices have increased from 100 percent to 200 percent above the 21-percent increase in average family income since 1979. The interest-rate subsidy programs offered by Detroit in June and July increased sales rates over 10 percent, indicat-

ing the market potential for price discounted product."

Mr. Davis believes that car sales will total about 9.6 million units this year, and rise to 9.8 million units next year and perhaps 10.5 million units in 1985.

Ann C. Knight, an analyst at Paine Webber Mitchell Hutchins Inc., has taken a more bullish stance. She issued a report in August to rebut an article in a national publication that said many potential buyers were staying away because wage increases were not keeping pace with car price increases.

"While no one can deny that there are people who can't afford a car, the article over-emphasized the importance of the list price," Ms. Knight said in her report. "We have found that changes in household net worth and average new car operating costs, which include depreciation and finance charges, are better indicators of new car demand."

She said that new car operating costs had declined as a percentage of household income. "We don't believe that recent cost increases are enough to hamper a robust domestic auto sales recovery," she forecast a 19-percent gain for 1983 and an additional 13.9-percent gain for 1984.

The automakers, of course, tend to share Ms. Knight's more optimistic view of the market, in some cases using planning volumes of close to 10.5 million units for next year.

While there is disagreement about which economic factors are significant, there is general agreement that the domestic automakers have been successful in maximizing the market approach. Dealers and manufacturers report that there is

(Continued on Page 115)

A Vital Catalyst for World Industry

The following is excerpted from the July issue of the OECD Observer, a monthly publication of the Paris-based Organization for Economic Cooperation and Development.

PARIS — The world economic importance of the automotive industry cannot be overstated, particularly its importance to the OECD countries.

The world automotive market is estimated at \$250 billion (on the basis of an average price of \$9,000 a vehicle). If sales of parts and used cars are included, along with the repair and servicing business, the total turnover of the industry could be 100 percent to 150 percent greater.

World car production peaked in 1978 at 31.8 million vehicles, but the market has been depressed since then and production fell to about 27.5 million vehicles in 1982. 13 percent below this record level, Japan and the United States are the world's biggest producing countries, accounting for 25 percent and 23 percent of global output in 1982, although

the six main producing countries of the European Community together produced more than either of the giant nations — 35 percent of the world total.

It has become a highly concentrated industry, with a few constructors accounting for the bulk of production. In the United States, two companies — General Motors and Ford — control 84 percent of the domestic market, while in Japan, the two largest producers — Toyota and Nissan — have 59 percent of the local market. The largest manufacturer in the world, General Motors, produced more than 5 million vehicles in 1981. The next four firms — one American, two Japanese and one European — each produced between 2 million and 3 million while three other companies (all European) produced 1 million or more. Three firms (two Japanese and one American) made more than 800,000 cars that year.

World trade in finished cars is thought to be worth about \$60 billion a year, \$57 billion of it accounted for by OECD countries and more than half by two countries — Japan,

with 30.6 percent of total world exports, and West Germany with 22.8 percent. The United States is a net importer, accounting in 1981 for more than 30 percent of total world imports. Europe also imported nearly 30 percent of the world total trade but, like Japan, remains a net exporter of cars. An exceptionally high proportion of Japanese production is exported — about 50 percent or more in 1981.

The auto industry is also a major employer. In West Germany, it accounts for 10.4 percent of manufacturing employment, in France for 9.6 percent, in Japan 8.9 percent, in Sweden 7.9 percent, in Britain 5.8 percent and in the United States 4.3 percent. Employment has fallen considerably in the industry in recent years as output has declined.

Until recently, most automobile manufacturers were solidly profitable businesses, financing investment out of their own profits to a large extent. During the last three years, however, the downturn in demand and the

(Continued on Following Page)

AUTO INDUSTRY

A Time of Transition as World Industry Faces Challenges

(Continued From Preceding Page)

automatic transmission cars, which have been ignored because of their relatively poorer performance and lower fuel economy.

All this tap dancing led to 10 million sales last year, with 11.5 million deliveries anticipated for 1985 and 13 million in 1990 — a

growth rate that far exceeds what North America can expect.

Potentially debilitating, however, are recession-induced labor tensions in Europe. Questions about alien workers have resulted in labor riots, and while men like Jaguar's John Egan and BL's Sir Michael Edwards have been able to squeeze higher productivity from

their workers, the overall labor outlook is bleak, with strikes and more riots anticipated as Europe comes out of recession.

Another factor hurting some European countries is the wide diversity of labor costs, ranging from \$6.62 an hour in Spain to almost \$13 in West Germany. The latter, for example, burdened Volks-

wagen's Golf/Rabbit with an uncompetitive price in many countries.

But the weakening of European currencies against the dollar allowed some businesses to export vehicles and automotive parts to Third World nations formerly dominated by U.S. manufacturers. Things are expected to improve for U.S. businesses within 18 months if the dollar weakens as anticipated, but there are some concerns that too much damage has already been done.

The brunt of the global recession, however, was taken by U.S.-based automakers. In 1982, car, truck and bus production of 6.9 million units was the lowest in the United States since 1961, and almost 50 percent below the peak output of 12.9 million units registered in 1978.

And there is an even more intricate problem facing North American automakers: dwindling production capacity. In the short and medium term, if an automobile turnaround occurs, Detroit may not be able to build enough cars to meet demand.

Peak North American production was 10.3 million cars in 1979. Now capacity is 9.8 million, and that offers no flexibility to meet demands for a mix of big and small models.

Estimates put Detroit's potential shortfall at almost one million units if the North American market hits an annual sales rate of 10 million units or more. Should the market turn, imports can be expected to take a significant share of any sales increases.

Many in the United States believe Detroit is neither worried about nor interested in this problem. Instead, analysts contend, Detroit is switching emphasis from high volume and low profit margins to lower volume and higher profits per unit. Furthermore, analysts insist, Detroit intends to meet any significant increase in demand by importing more vehicles from

offshore facilities in Japan or Mexico.

Ford, for example, is quietly working on plans that would bring automobiles designed by Toyo Kogyo into the United States from a Ford-owned Mexican manufacturing plant. Chrysler's Mexican operations build K-cars meeting all U.S. safety and emissions standards. (The company ships Mexican-built, rather than U.S.-made, K-cars to Puerto Rico.)

Ford will begin importing its European Sierra to the United States as a high-line specialty model in the Lincoln-Mercury franchise later this year.

GM's deal to import small cars from Japanese affiliates Isuzu Motors Ltd. and Suzuki Motor Co. Ltd., as well as its joint venture to build subcompacts in Fremont, California, with Toyota, points the way to a time when no U.S.-built small cars will be needed from solely GM manufacturing plants.

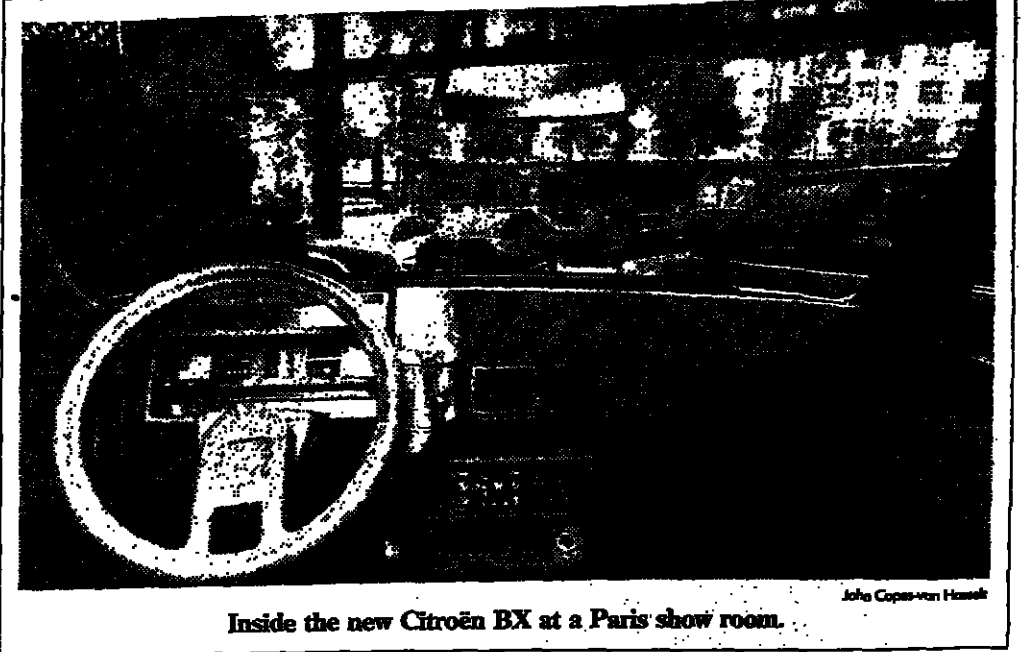
Foreign-based companies will be taking up some of the slack in U.S. production. Honda's Marysville, Ohio, operation went on stream this year, building Accords, and is expected to begin assembly of the BL-Honda car in 1985. Nissan Motor Manufacturing's truck plant has automotive expansion penciled into the corporate blueprints.

European truckmakers such as Volvo and Daimler-Benz AG have operations in the United States, and Japan's Hino Motors Ltd. is scheduling a plant in the South to assemble CKD medium-duty trucks by the end of this year.

None of this will do much for the United Auto Workers union, whose rolls have dropped to fewer than one million members in the last five years. And the strong anti-union stands by many of the foreign operations' officials are expected to produce the most severe labor unrest in recent U.S. automotive history.

But that seems to be in the cards regardless of what country is discussed. Even Japan, with its calm labor relations, is expecting relatively bitter confrontations between automakers and workers.

Cutbacks have become a global phenomenon. GM chopped its worldwide labor force from 853,000 in 1979 to 657,000 last year. Chrysler's U.S. white-collar work force is 21,000, down from 40,000 four years ago. GM's Buick division expects to build luxury models in Flint, Michigan, with 3,600 workers instead of the GM-approved number of 5,200; assembly time will decrease from 49 hours to less than 30 hours per vehicle.



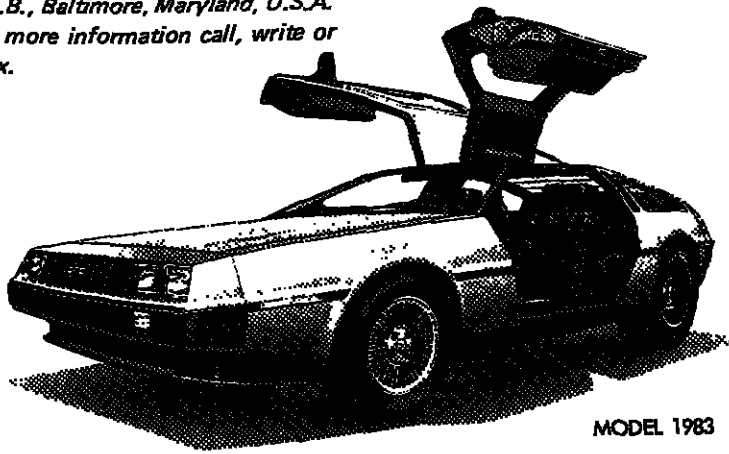
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A Vital Catalyst to World Industry

(Continued From Preceding Page)

resulting intensification of competition have brought some firms to the verge of bankruptcy — two in particular having to be bailed out by their respective governments (Chrysler and British Leyland). In a bid to improve their efficiency and their competitiveness, the main manufacturers have recently embarked on massive investment programs to update their production processes. American manufacturers have earmarked about \$80 billion for re-equipping their factories over the seven years from 1978 to 1985. During the same period, European manufacturers are planning to spend an estimated \$35 billion on new capital equipment, and in Japan auto firms are investing

about \$12 billion over a three-year period (1980-1983).

Economies of scale are considerable in the industry and have resulted in the growing concentration of the industry as international competition has built up over the years. Also the growing costs of product development and of marketing and distribution operations have led to an increase in cooperation between companies. Cooperative technical, marketing and production ventures have been established by General Motors and Isuzu (prior to the recent agreement with Toyota), Chrysler and Mitsubishi, Ford and Toyo-Kogyo and Renault and American Motors. Joint research and development arrangements have also been pioneered in Europe, where Pe-

ugeot, Renault and Volvo are cooperating in engine design and production in a jointly owned factory in France, while Renault and Volkswagen are involved in joint gearbox development and Fiat and Peugeot are working together on small engine production.

The future development of the motor industry will depend largely on the level of demand in the next 10 or 20 years. That will determine whether the present production capacity being developed and modernized is justified and whether there is room for all the major manufacturers now in the market.

New car registrations in 1980 amounted to about 28 million, of which the OECD area accounted for 23 million, or about 82 percent. (Continued on Following Page)

Optimism on Alfa-Nissan Joint Venture

(Continued From Preceding Page)

21,000 Datsun Cherry Europes in various countries outside Italy, and is hoping to sell about half in Britain.

Both cars will be considered Italian rather than Japanese, since they will have been built 80 percent by Alfa Romeo and 20 percent by Nissan. In essence, Alfa is building the engines and transmissions and Nissan the bodies.

The joint venture agreement was initially controversial. It split the Italian government and was bitterly opposed by Fiat, which charged that it would bring a Japanese

"Trojan horse" into Europe. Those in Italy who favored the agreement cited unemployment statistics in Naples and Alfa's financial troubles. "Without this co-production agreement," said Gianni de Michelis, then state holdings minister, "Alfa would be lost."

"It is absolutely not accurate to say that the agreement saved Alfa Romeo," said Mr. Pengia, who pointed to the introduction of the Alfa 33 model in June, increases in worker productivity, a new financing program, worker layoffs and better management. The company's losses dropped to \$46 million in 1982 from \$63 billion in 1981

while sales increased 3 percent to 197,800 units from 192,000.

Indications are that Alfa Romeo will rely on more joint ventures. The company has a five-year, \$4.5-million agreement with Daihatsu of Japan to manufacture 8,000 Charade models in South Africa. And in June 1981, Alfa signed an \$87-million accord with Fiat for joint manufacturing — and joint purchases of major components from outside suppliers — for a new, upper-range 2,000cc car that Alfa will launch in a few years to replace its Alfetta model. This agreement, it is estimated, will save 15 to 20 percent in costs.

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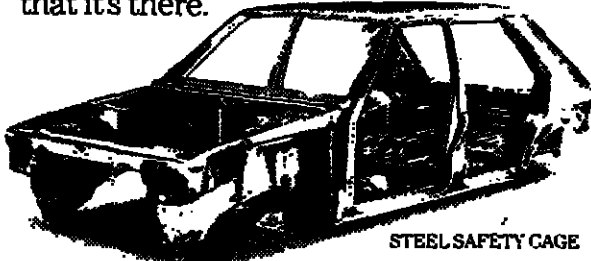
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AUTO INDUSTRY

Vital Catalyst to International Industry

(Continued From Preceding Page)
The OECD market was 8 percent down in 1980, with 1.9 million fewer vehicles registered than in 1979, and demand weakened further in 1981 to about 20 million.

One of the problems is that the downturn in the market may not be due purely to cyclical but also to a longer-term structural development as OECD markets approach saturation levels. The main component of demand is now a function of replacement rather than first-time purchase. This trend has now spread to many OECD countries, with the result that the annual rate of demand growth for automobiles fell from more than 6 percent in the 1960s to around 1.6 percent in the 1970s. There is little prospect that this trend will be reversed in the main OECD markets, unless there is an upward shift in saturation levels or a decrease in vehicle lifetimes, leading to higher scrapping rates. But such changes in behavior do not look likely, and it is not expected that the rate of demand growth will return to the levels of the 1960s.

Outside the OECD area, however, there is considerable potential for growth, with automobile markets in a number of developing countries reaching takeoff stage. Thus these countries will account

for an increasing share of the world market over the medium to long term, but they are starting from a low base so the OECD area will continue to account for the bulk of world sales for some time.

While demographic factors and income levels are basic determinants of the demand for automobiles, operating costs and vehicle prices also constitute direct influences on the ownership and use of private cars. The proportion of the household budget spent on transportation tends to remain constant. So any increase in one element is offset by a decrease in another. In particular, rises in fuel costs tend to lead to a reduction in the distances traveled while, over time, increases in costs and vehicle prices tend to have an impact on ownership and demand through a trend in favor of smaller vehicles. Car prices vary considerably from country to country because of the differences in local tax rates, the cost and availability of credit, the differential between new and used car prices, geographic conditions (car ownership tends to be higher in rural than in urban areas), not to mention noneconomic factors of a more psychological nature (such as the desire for privacy, status, faster travel) that can sustain automobile demand when economic circum-

stances might otherwise exert a negative impact.

The OECD secretariat's projections for automobile demand up to the year 2000 suggest that the share of North America and Western Europe will decline by that year, while Asia's and Latin America's will rise substantially and Eastern Europe's and Africa's slightly.

Most OECD markets seem to be approaching saturation levels, with replacement demand now typically accounting for 85 percent or more of total demand. In this situation, overall demand becomes a direct function of the average lifetime of motor vehicles, and the most positive aspect of the current state of the market is that scrapping rates at the moment are below their anticipated long-term level. Historically, average vehicle lifetimes range from around 10 years (in Belgium and France) to 16 years (Sweden).

In mature OECD markets, first-time demand is expected to be 50 percent lower in 1990 than it is now, the only exception is Japan, where new demand is forecast to be 50 percent higher than in 1979-1980 at least until the mid 1980s.

Despite this fall in first-time demand, however, total demand for motor vehicles is still projected to expand appreciably between 1985 and 2000 even within the OECD

area. During this period, sales are expected to grow by about 880,000 units in the United States, by 480,000 in Spain, 400,000 in France, 340,000 in Italy, 330,000 in Japan and 190,000 in Britain.

Market growth will be greater in the non-OECD area in relative terms between 1985 and 2000, of course, although still well below OECD levels in absolute terms for the bulk of these countries. But some markets are predicted to expand significantly faster than the OECD in absolute terms; these include Brazil, where sales are expected to increase by 1.58 million units a year over the period, the Soviet Union (an additional 1.16 million), Mexico (plus 760,000), the Middle East (plus 670,000) and the rest of Eastern Europe (plus 590,000).

Overall, it is estimated that total world demand for automobiles could be 25-percent higher in 1990 than at present, with a further 22-percent increase between 1990 and 2000. By 1990, replacement demand will constitute 71 percent of total world demand, against 58 percent now, rising to 76 percent by the end of the century. The average annual growth rate for world automobile demand is forecast at 2 percent throughout the 1980s and 1990s.

No Alternative to Competition

John F. Smith, Jr. is director of worldwide product planning for General Motors Corp. The following are excerpts of a speech he gave March 16 at the third U.S.-Japanese Automotive Industry Conference at the University of Michigan, Ann Arbor.

PROTECTIONISM is not a good answer [to foreign competition in the automotive industry]. Legislation is inflexible. And [it] often results in more problems than solutions. Instead of trying to hide behind laws and regulations, U.S. auto companies must catch up with their foreign competition — and catch up as quickly as possible.

In the automotive industry, we must learn to design and manufacture small cars economically. We must be a leader in managing technology. Labor and management must continue their united efforts to bring our labor costs down to competitive levels. And we must make quantum improvements in productivity and quality. That is the only true road to recovery for our industry. It's a difficult road — but it's the only one open to us.

Everyone in the American and European auto business is striving to overcome the competitive advantage held by the Japanese. Certainly, part of the competitive strategy must emphasize new design and manufacturing technology. There is no doubt that robots, lasers, flexible automation and computer-aided design systems can help us improve

quality and productivity, while reducing costs.

But new management strategies are also required. And among those strategies are the expanded use of cooperative business arrangements among automotive manufacturers — more specifically, between U.S. and Japanese companies. These arrangements can give us the best of both worlds ... combining the excellence of Japanese manufacturing and management techniques with American technological leadership. Within the duration of these business arrangements, American automakers can more expeditiously bridge the gap between U.S. and Japanese manufacturing systems and guarantee their ability to compete in the international automotive business.

These business arrangements can take many and varied forms — including joint research and development, licensing and marketing agreements, common production of components, joint ventures, supply agreements, and equity ownership. Equity ownership agreements are attracting a great deal of attention these days. American Motors and Renault, Ford and Toyo Kogyo, Chrysler and Mitsubishi are all examples.

Equity ownership and joint ventures are the most familiar examples here in the United States, but cooperative business arrangements — of many types — are really nothing new to the automobile industry. The Europeans were probably the pioneers in this field,

and they continue to practice such arrangements extensively. For example:

• British Leyland now assembles and sells the Honda Accord under license in Britain. The success of this venture has led the two companies to work together on the design, engineering and development of a new luxury car.

• Volkswagen supplies engines and transmissions to Chrysler and makes some body panels for BMW.

• Volkswagens are to be assembled at Seat plants in Spain under an agreement between the two companies.

• And VW has held talks with Nissan on producing the German company's Santana model in Japan for Japan and Southeast Asia.

• VW and Renault also have recently agreed to build transmissions jointly.

• Ford Motor Co. owns a 25-percent equity interest in Toyo Kogyo and relies on that low-cost Japanese source for many of the cars it sells in Japan and the rest of the Asia-Pacific area. Again, the attraction of low-cost, high-quality production of small cars has led Ford to turn to a Japanese producer for a product suitable for this geographical area. Reportedly, Ford is also considering that source for future distribution in the United States.

That's hardly an exhaustive list. But it does make the point that business arrangements take many forms. They can range across the entire automotive manufacturing process — from design to manufacture, assembly, procurement and distribution.

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Frankfurt Star: Volkswagen Pins Hopes on Golf Mark II

Special to the IHT

FRANKFURT — Volkswagen's new Golf, now in the showrooms, is the undoubted star of the 50th International Motor Show, which is opening in Frankfurt today. At least one million persons are expected to attend the show.

The press reviews of the Golf Mark II have been mixed during the month before the show. "Evolutionary, not revolutionary," "a fantastic auto in a boring package" and "more Japanese than Japanese" are among the judgments in West Germany's daily newspapers and automotive press.

Volkswagen Chairman Carl Hahn is banking on the new Golf to put the company back in the black next year after worldwide 1982 losses of 300 million Deutsche marks. The company's losses have continued into 1983. Investment and development costs alone for the Golf II total 2.1 billion Deutsche marks.

About 6.5 million Golfs have been sold since the model was introduced in 1974 and it now accounts for 40 percent of the Volkswagen/Audi group's worldwide production. For much of its nine-year life it has been Europe's best-selling car, challenged only recently by General Motors' Opel Kadette.

The new Golf, whose development took five years, must therefore pick up the mantle of Volkswagen's mass sales car. From the outside the changes are subtle — 17 centimeters longer and five centimeters wider than the previous model. A West German automotive

writer testing the model launch in Bavaria reported that "it didn't turn one head."

Inside, the Golf II has 30 percent more luggage space. It is more economical, with the drag coefficient reduced to 0.34 from 0.42 on the earlier model, and the 1.3-liter, 55-horsepower basic model will cost 13,490 Deutsche marks — 3 percent more than the earlier model.

Volkswagen hopes to reach daily production of 2,000 units by the end of 1983 and 3,400 in European plants during 1984. The new Golf should begin rolling off U.S. and South African production lines by next summer.

Although the development and promotion costs are expected to prove a drag on 1983 earnings, Volkswagen can look forward to lower labor costs in the medium term after building a new assembly hall at its main Wolfsburg works.

At Wolfsburg, 250 robots will perform nearly all assembly work on the Golf. This has eaten up 548 million Deutsche marks of the development costs, of which 221 million has been spent on the robots.

From the outside the changes are subtle ... A West German automotive writer testing the model launch in Bavaria reported that "it didn't turn one head."

Volkswagen's production chief, Günter Hartwich, said at a pre-launching press conference in mid-August that the new technology will enable 1,000 jobs to be trimmed from the 5,000-strong Golf production work force at Wolfsburg. The company is providing a retraining and early retirement program to avoid redundancies.

Volkswagen's critics say the new Golf has been too long in the making, leaving the company too exposed to the slump in U.S. sales, where the Golf is marketed as the Rabbit. Once viewed by Volkswagen's former chairman, Toni Schmücker, as the company's most promising overseas market, the United States turned into a nightmare during the last two years. Volkswagen's market share in the United States has slumped below the 3-percent level from a high of 7.2 percent in 1970.

One of Mr. Hahn's priorities since he was brought in from the tire manufacturers Conti-Gummi to head Volkswagen in early 1982 has been to stem U.S. losses, which were mainly responsible for driving the group into the red worldwide last year.

Volkswagen has sold its partly completed Sterling Heights, Michigan, car assembly plant to Chrysler Corp. for \$192 million, although payments will be stretched over 12 years. This plant, bought by Mr. Schmücker in 1979, had been a major headache for U.S. operations and work on equipping it was halted in the middle of last year.

Production at the remaining U.S. plant in Westmoreland County, Pennsylvania, has been cut back and preparations are under way for the new Golf.

Stock analysts in Frankfurt are confident that the strong U.S. economic recovery, coupled with the sale of Sterling Heights, should provide a sound basis for launch of the Golf II there next summer. Mr. Hahn has been very cautious about U.S. prospects, but was quoted in Zurich's Weltwoche newspaper in mid-August as saying that the U.S. subsidiary will move out of the red this year.

Although there are potential problems, mainly at Volkswagen's operations in Latin America, where the international debt crisis continues, the stock market seems to have shrugged them off and optimism over sales of the Golf II has been a major factor pushing Volkswagen share prices higher.

As a measure of investor confidence, by the end of August Volkswagen's shares were trading 46-percent higher than at the beginning of the year, outstripping the wider market as measured by the Commerzbank index of 60 stocks, which gained 20 percent.

The Strong U.S. Recovery

(Continued From Page 95)

an increase in general automotive interest.

Performance, styling and appeal are more important than ever. GM's new Corvette is doing very well. Firebird and Camaro sales remain strong, and Pontiac's new two-seat Fiero sports car will generate even more market enthusiasm. Ford's Thunderbird, Cougar,

Tempo and Topaz models have been well-received and are profitable. Chrysler, which did well enough with K-car derivatives, like its convertibles, is coming right back with its Dodge Daytona and Chrysler Laser models in the sports car segment and a host of other performance packages. American Motors is introducing the Encore version of its successful Alliance model.

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Illustration shows Senator C, with 3.0 litre fuel-injected engine, 5-speed manual transmission, power steering, alloy wheels, 4-wheel disc brakes, on-board computer and many other features as standard. 180 bhp (132 kw), 0-100 km/h in 9 sec., top speed 210 km/h.

AUTO INDUSTRY



Volvo's new 240 station wagon.

New Fuel Economy: Designers Streamline, Cut Weight

The author is the editor of *Motor*, an automotive magazine published in Britain.

By *Anthony O'Connell*

LONDON — It has long been the aim of the automobile designer to create a car that is both aerodynamic and lightweight. Now, as many manufacturers have improved their aerodynamic designs, the major role of the designer has shifted to the reduction of weight.

An insight into the designer's role can be gained by looking at the modern automobile from the outside in, starting with the engine because until very recently most car designers have ignored the fact — known for decades by aerodynamic engineers — that from about 50 kilometers an hour (30 miles an hour) onward the majority of the power developed by an engine is spent in overcoming wind resistance. Reduce wind resistance and you reduce fuel consumption.

The acceptance of aerodynamic engineering — of this basic physical law over the last three to five years has led to a complete change in attitudes toward body styling and so a tremendous emphasis on aerodynamic efficiency, as measured by its "drag factor" or "drag coefficient," which was in the

region of 0.45 for the average car until recently.

But during the last year a new generation of much more aerodynamic cars has been introduced with drag coefficients in the 0.30-0.36 region. Some, like the Ford Sierra (drag coefficient equals 0.32-0.34 according to model) are to a certain extent rounded and conventionally "streamlined" in appearance, while others, like the Audi 100 (drag coefficient equals 0.32-0.32 according to model) have superficially conventional shapes that have been given low aerodynamic drag through painstaking attention to detail. Even small cars, which are much more difficult to streamline, have improved remarkably in this respect — the new Fiat Uno with its 0.34 drag coefficient being an example. And in five years' time most new cars will probably have drag coefficients in the 0.20-0.25 range.

Another way of reducing the engine's workload and improving fuel consumption is by cutting overall weight. Here, however, the scope for improvement is not so great, partly because few Japanese or European models have been much overweight for some years and partly because the need to meet safety requirements that assure adequate passenger protection in collisions limits the extent to which a car can be further lightened. On the other hand, the task of the engineer has been greatly eased by a number of computer-aided de-

sign techniques, and in particular one called "finite element analysis." With its help, further weight reductions have been achieved, though often only by using more advanced materials such as light-weight high-strength steels or various forms of plastic. The Citroën BX introduced last fall, for example, uses plastic for its tailgate frame, hood, fenders and many smaller parts.

Before he even looks at the engine itself, the skilled automobile engineer has yet another economy weapon and a powerful one: the transmission system. One simple way of improving fuel consumption is to provide a car with very "high" or "tall" gearing, so that, say, 1,000 RPM of engine speed is equivalent to 35 kilometers an hour (22 miles an hour) of road speed in top, instead of 29 kilometers (18 miles an hour). Many of the new models introduced during the last three years or so have been designed to fit this formula — not always with satisfactory results.

Few motorists are much good at selecting the right gear for the conditions in any case, however, so a better solution might be to fit a fully automatic gearbox. Conventional automatic transmissions of the type so common in the United States are not the answer, unfortunately, due to the high frictional losses within them, although they are certainly improving, a notable example being the four-speed unit fitted to certain BMW 7-series models. Never-

theless, the ultimate solution is something different: a low-loss electronically controlled Continuously Variable Transmission, or CVT, that automatically selects the most fuel-saving ratio for any given condition. The development of such CVTs has been going on for some years, but most manufacturers have been scared off by the huge investment required to put one into production.

Naturally engine development has not been neglected in the search for better fuel consumption, the aim of all motor manufacturers being to introduce high compression ratio/"lean burn" gasoline engines of high efficiency. Most companies have adopted a step-by-step approach, progressively raising compression ratios and weakening fuel/air mixtures year by year. In all cases, however, the improvements in efficiency have only been made possible through the use of sophisticated microchip-based "electronic engine management" systems.

Some engineers, of course, say that the power unit of the future is already with us — the diesel engine. But although diesels are undoubtedly more efficient than gasoline engines in certain regimes of operation, they are heavier and more expensive to make, and the gasoline engine is catching up fast in efficiency.

Either way, the super-economy family car is not far off.

Industrial Structure, Production Scheduling Reinforce Japan's Competitive Edge

By John Hardley

TOKYO — Organization, investment in modern factories and a strong domestic market have given Japan the edge when it comes to cutting the cost of auto production. But a lot of the advantage also comes from Japan's industrial structure and production scheduling.

The first key to low costs is the structure, extending down from the big, visible companies through a layer of large suppliers to a myriad subcontractors.

At the end of this long chain are tiny, low-overhead workshops with one or two employees machining brackets or grinding spindles for components. These workers are usually paid less than autoworkers and for longer hours — probably a 48-hour week. This system cuts the cost of parts, and gives flexibility; when the going gets tough, it is the small suppliers who suffer.

At the other end, the industry is continually installing modern automated equipment, such as robots. Automakers are starting to use robots for paint spraying — although some men are still needed — and for simple assembly jobs, such as fitting front seats and installing the spare tire in the trunk.

Although it is commonly thought that there are many more automaking robots in Japan than elsewhere, modern auto factories in the United States, Europe and Japan do not differ much in the number of welding robots in use.

But the Japanese have found ways of building many different bodies on one assembly line, and in this respect are ahead of their competitors. Ford in Europe, for example, uses separate lines for sedan and estate car bodies in the initial stages of its otherwise impressive Sierra body-welding line.

At Toyota's Tahara plant, three models go down one line; at Mitsubishi Motors's Okazaki plant, five models go down one line. In the latest Toyo Kogyo factory, three versions of three different models will be made on one line. Thus investment costs are reduced and greater flexibility is obtained.

Toyota uses 90 robots to build the Soarer, Celica liftback and Supra cars, while Mitsubishi uses 103 robots to build its Sigma, Starion, Tredia,

Chariot and Cordia models. TK uses 130 robots on the new 626 at its Hoku plant.

The new Hoku plant, 40 miles (65 kilometers) west of Hiroshima, is typical of the latest thinking in Japanese auto production. It was built in little over a year for 200 million yen (\$1.5 million). Although three versions of the 626 are produced, with few changes the plant can produce two other models at a cost of about 20 million units a month, as well as 7,000 knocked-down kits.

By any standards, a plant employing 1,400 people that can assemble 1,000 vehicles a day is highly productive. TK claims that the output per man is 1.9 times that at Hiroshima. The tremendous gain.

As is common in Japanese assembly plants, many parts are not made in-house. For example, door panels, fenders and trunk lids come from a

supplier at Hiroshima. The suppliers of big parts, such as seats and fascia moldings, have set up satellite plants at Hoku.

In the press shop, all the handling in the press line is automated. But the main gain in productivity results from a higher level of automation of welding — 88 percent, against 78 percent at Hiroshima, the increase coming from greater use of robots — and the robots in the paint plant. A 90-percent automation rate for body welding is common in the bigger Japanese car factories.

In switching to robots in the paint shop, the Japanese followed the lead of General Motors. The robots spray undercoat and paint onto the body with precision, and humans spray small areas the robots cannot reach.

In the assembly shop, TK has concentrated on improving working conditions, as well as the flow of parts. For example, the doors are

removed from the body as soon as it enters the assembly shop and are assembled on separate lines. Toyota and Nissan also do this in their modern plants. It is easier for the men to work on doorless cars, and the doors are less likely to be damaged.

To simplify assembly of brake pipes and other components that must be fitted beneath the car, part of the assembly line is tilted. Toyota uses a similar line at its latest plant.

Nissan, Toyota, Mitsubishi and TK are beginning to use robots for simple assembly jobs. In addition to the aforementioned examples, robots run sealers around the windshield, install the windshield and take the battery to the car. This is just the beginning of a long road as robots take over from men in many assembly jobs.

Optimism at Coventry: Record Sales in U.S. Help Jaguar Comeback

By Peter Waymouth

LONDON — Three years ago the British luxury automaker Jaguar was a once-proud name fighting for its life. The quality and reliability of its vehicles had declined alarmingly, the engineers had lost touch with the market, and production was running at less than half of capacity.

In 1980 Jaguar made 14,000 cars, against 26,500 two years before and a peak of 32,000 in the early 1970s. During the early part of 1983 the company was losing £2 million a month and there was every prospect that the parent group, B.L., had pressed to keep its volume car business afloat, would decide that Jaguar was expendable.

Today Jaguar is enjoying record sales in its biggest market, the United States; production is buoyant and there is a new spirit of optimism at the company's

headquarters in Coventry. Above all, Jaguar is making a profit.

Much of the credit for this remarkable reversal in fortunes must go to Jaguar's chief executive, John Egan. He was 40 when he took over in April 1980, when things were at their worst, and his task was daunting. He had to save Jaguar quickly or the company would go under.

Mr. Egan had worked at B.L. before but had left because he was convinced that centralization would not work. Jaguar, in particular, stood to lose the very character and identity that had made people buy its cars, he felt. Mr. Egan agreed to come back only on the assurance that Jaguar would regain its autonomy.

The biggest problem he had to tackle was Jaguar's latter-day, well-deserved reputation for badly finished and unreliable cars. Despite the commissioning of a costly new paint plant, paintwork remained so poor

that cars had to be resprayed before they were sent out to customers. Jaguar salesmen in the United States reportedly tried to tie up their deals on Friday nights so that they had time to dispose of traded-in vehicles before angry customers returned Monday morning to demand their old cars back.

Mr. Egan ordered a close look at the main opposition, the West German luxury automakers Daimler Benz and BMW. The investigation revealed 150 areas, from paintwork to steering, where Jaguar fell short. Mr. Egan set up management task groups to deal with these faults, and the 12 worst were taken up at board level.

Mr. Egan reckoned that about 60 percent of the trouble could be traced to components bought outside. Jaguar threatened to take its business abroad if quality did not improve, and refused to sign new

contracts unless suppliers agreed to meet all warranty costs.

Once a car gets a bad name, as Jaguar had, it can take a long time to convince customers that things have improved. This was particularly so in the United States, where Jaguar's performance had been undermined not only by poor quality but by a persistent failure to have cars in the showrooms in time for the new model year.

Now complaints about quality have virtually disappeared and sales in the first half of this year, at 7,733, were 73 percent higher than in the first six months of 1982. Two years before that, Jaguar sold 3,000 cars in the United States during the entire 12 months.

The next important target is West Germany, which has the biggest market for luxury cars in Europe at 60,000 units a year.

A Balance Sheet of Initiative.

It is common practice to compare a Company's Balance Sheet with that for the previous year. However, it is even more important to consider over a longer period the results of initiatives taken during earlier years. We do both. That is the only way to present a complete picture.

Corporate Planning for the long Term

During the last decade, worldwide production of passenger cars has fallen by 9%, yet over the same period, production and sales of our passenger car has increased by 38%. This is a convincing endorsement of the various initiatives resulting from our corporate strategy.

Not only have we been able to improve our safety and quality standards, but our cars are also more fuel efficient and environmentally acceptable. We have gained new customers by introducing new models. In our factories, we have underpinned our high quality and flexibility by installing the most advanced equipment and introducing the most up-to-date production methods. We now have an efficient sales and service network responsive to customer's needs, throughout the world. This represents a good basis for further growth, however strong the competition. These are important factors in our corporate success. Especially when it is remembered that few industries have to plan over such a long time scale. It takes five to seven years to develop a new model which is then produced for a period of eight to ten years. After that the average road life of a Mercedes is thirteen years. So the vehicles we are now developing will still be on the roads in the year 2010.

We have never deviated from our policy of long-term responsibility, care and thoroughness. One result: in 1982 we sold over 100,000 S-class models, an achievement which could not have been believed possible only a few years ago. In particular, the 8-cylinder light alloy engine, with fuel savings of up to 22% has proved itself an outstanding success.

In 1983, we successfully introduced in a number of markets the 190/190E, the first models of a completely new range continuing Mercedes quality within compact dimensions.

DAIMLER-BENZ AKTIENGESellschaft

Extracts from the Consolidated Balance Sheet

	31st December 1982	31st December 1981		31st December 1982	31st December 1981
ASSETS	(DM.m)	(DM.m)	LIABILITIES	(DM.m)	(DM.m)
Total fixed assets of which property, plant and equipment (net)	6931	5727	Total equity of which share capital	6917	6266
Total current assets of which cash and short term investments in securities	15996	14637	Total liabilities of which provisions proposed dividend	15779	13846
	4619	4143	Balance Sheet Total	22954	20428

Extracts from the Consolidated Profit and Loss Account

	For the 12 months ended 31st December 1982	31st December 1981		For the 12 months ended 31st December 1982	31st December 1981
	(DM.m)	(DM.m)		(DM.m)	(DM.m)
Sales	38905	36661	The unabridged Consolidated Financial Statements and the Financial Statements of the Daimler-Benz AG for the year ended 31st December 1982 have been certified without qualification by the Deutsche Treuhand-Gesellschaft AG, Wirtschaftsprüfungsgesellschaft, Frankfurt (Main) and have been published in the "Bundesanzeiger" ("Federal Gazette").		
Cost of materials	20047	19497	Copies of the Annual Report with the unabridged Financial Statements may be obtained on request from Daimler-Benz AG, Department FBW/APP, P.O. Box 202, D-7000 Stuttgart 60, Federal Republic of Germany.		
Personnel costs	70712	9993			
Depreciation	2273	1683			
Total taxation	3310	3091			
Net profit	921	826			
Appropriated: increase in group reserves	571	522			
proposed dividend	350	304			

1982 - a Year for Exports

Despite the world economic situation, 1982 was a good year for Mercedes-Benz.

This welcome result was due to the strong growth performance of our passenger cars and steady sales of commercial vehicles. Thanks to buoyant exports, Daimler-Benz had a higher turnover than that of any other German vehicle manufacturer and again achieved the best financial results of any European motor manufacturer.

Revenue from passenger car sales rose by 13% from 16,600 Million DM to 18,700 Million DM. Particularly gratifying was our growth in the US, France, Great Britain and Switzerland, and we also increased our domestic market share slightly, against a background of generally falling sales volume. Our production facilities were fully utilised during 1982, turning out 450,345 passenger cars. This represents an increase of 17,500 over the previous year.

We sold commercial vehicles worth 18,900 Million DM, thereby maintaining sales not far from the 1981 total. The large commercial vehicle markets of North and South America continued to suffer from their recession, and this inevitably influenced the results obtained by our commercial vehicle factories located there.

In Germany, we manufactured 187,000 vans, trucks, coaches and Unimogs and MB tractors. We succeeded in countering the falling world market for heavy goods vehicles by producing and selling 63,513 units, yet another increase. Extremely good sales to the Near East contributed significantly to this result and we were also able to increase our sales to EEC countries by 18%.

The other sectors of our commercial vehicle range did not altogether escape the prevailing weakness of the markets, but we managed to smooth out the resultant capacity fluctuations in our German factories, and were able to avoid short-time working.

Investment

Within the framework of our medium term plan, we shall invest in our German factories alone 3000 Million DM in fixed assets during 1983, and the same amount in 1984. This follows an average capital expenditure of about 2500 Million DM in 1981 and 1982.

Our research and development programme, too, is future-oriented. In 1982 it accounted for expenditure of more than 1400 Million DM. Much of that was considered impossible twenty years ago is common practice today, and we must go on laying the foundations for the achievements of the next two decades.

Sustaining Employment

At the end of last year, we employed some 186,000 people worldwide. More than 148,000 of these were employed in Germany, and over the last 10 years we have created more than 22,000 new jobs.

We take seriously our responsibilities towards the younger generation. We have increased the number of trainees and now have a record of 8,500 young people under training.

Fresh Initiatives for the Future

With our strong earnings-base we have laid the foundations for the ongoing success of our Company. Our Research and Development activity is dedicated to the ceaseless improvements of our products.

With the 190/190E range we shall open up further growth prospects for our company. In Germany, we sell 6,000 vehicles every month — as many as our present production facilities permit. The 190/190E models had achieved a breakthrough in the market within a short time of their launch.

Against this background of success we are hard at work, systematically enlarging the new range.

Future success stems from present initiatives. These are the sign of our confidence that our vehicles, like our company, are both set for a continuously successful future.



Daimler-Benz Aktiengesellschaft

94
1/2/83

مركز البحث

NYSE Most Actives			
Symbol	Price	Change	Volume
IBM	124 1/4	+1 1/4	1,234,567
AT&T	52 1/2	+1/2	987,654
GE	34 1/2	+1/2	876,543
Amgen	21 1/2	+1/2	765,432
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Amgen	21 1/2	+1/2	765,432
Amgen	21 1/2	+1/2	765,432
Amgen	21 1/2	+1/2	765,432

Dow Jones Averages			
Index	Price	Change	Volume
Indus	2,844 1/4	+14 1/4	1,234,567
Transp	1,144 1/4	+14 1/4	987,654
Comp	4,144 1/4	+14 1/4	876,543
NYSE	2,844 1/4	+14 1/4	765,432

NYSE Index			
Index	Price	Change	Volume
NYSE	2,844 1/4	+14 1/4	1,234,567
NYSE	2,844 1/4	+14 1/4	987,654
NYSE	2,844 1/4	+14 1/4	876,543
NYSE	2,844 1/4	+14 1/4	765,432

Wednesday's NYSE Closing			
Index	Price	Change	Volume
NYSE	2,844 1/4	+14 1/4	1,234,567
NYSE	2,844 1/4	+14 1/4	987,654
NYSE	2,844 1/4	+14 1/4	876,543
NYSE	2,844 1/4	+14 1/4	765,432

AMEX Diaries			
Index	Price	Change	Volume
AMEX	1,234 1/4	+14 1/4	1,234,567
AMEX	1,234 1/4	+14 1/4	987,654
AMEX	1,234 1/4	+14 1/4	876,543
AMEX	1,234 1/4	+14 1/4	765,432

NASDAQ Index			
Index	Price	Change	Volume
NASDAQ	2,345 1/4	+14 1/4	1,234,567
NASDAQ	2,345 1/4	+14 1/4	987,654
NASDAQ	2,345 1/4	+14 1/4	876,543
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Amgen	21 1/2	+1/2	765,432
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Carl Gewirtz

on Eurobonds

Handwritten notes and signatures

Handwritten text: "Handwritten text and signatures at the bottom of the page, including a large signature and some illegible notes." data-bbox="62 940 913 995"/>

Wednesday's
AMEX
Closing

Vol. of 4 p.m. 4,000,000
Prev. 4 p.m. Vol. 5,740,000
Prev. Consolidated Close 5,740,000

Tables include the nationwide prices
Up to the closing on Wall Street

Table with 10 columns: 12 Month High, Low, Stock, Div., Yld., PE, 52 Wk. High, Low, Close, Chg. Qtr. Chg. Yr.

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U.S. Deregulation of Bank Rates Stirs Competition

NEW YORK — Almost three weeks before the final major step in the deregulation of interest rates in the United States, competition for consumer deposits is intensifying. In the New York area, Citibank and Dollar-Dry Dock Savings Bank are already running newspaper advertisements seeking to lure deposits into accounts that will be available Oct. 1, and other banks are likely to be drawn into the fray.

How Petersen Quietly Brought Change to Ford

(Continued from Page 13)

well and for Ford. It is still too early to tell, for example, whether the company's gamble on radical styling will help it to regain its lost share of the American car market, which fell to 16.7 percent in 1982 from 23 percent four years earlier. And Ford, like the other American automakers, remains vulnerable to the cost advantages enjoyed by Japanese manufacturers, especially if import restraints are relaxed.

COMPANY EARNING

Britain, N. Zealand, etc.

SPORTS

The Scientific Sailor Takes on the Perfectionist

By Joanne A. Fishman

New York Times Service

NEWPORT, Rhode Island — When John Bertrand, the skipper of Australia II, arrived at the docks a couple of minutes too late for a recent scheduled appearance on the "Today" show, Dennis Conner, Liberty's skipper, said jokingly, "Hey, John, I hope you're this late on Tuesday."

The easy rapport and longtime friendship between Conner and Bertrand had put aside temporarily for the four-of-seven-race series in the 25th defense of the America's Cup when Liberty, the defender, meets Australia II, the challenger. Not only is the ornate silver cup at stake, but so is what it represents: the winning streak, meaning the cup is the longest.

And for perhaps the first time, the defender is not favored to win. Led by the British challenger, has made Australia II the favorite at 8-11, while Liberty is even money.

It is remarkable that the odds should favor the challenger, considering that no one has spent more time and effort preparing than Conner, who defended the cup in 1980 with Freedom. Over the last five years, he says, he has spent 6,000 hours at the helm of 12-meter yachts.

Conner, who skippered the Italian challenger during this summer's foreign trials, said that although he believes the series will be close, the Americans will win because of Conner's intimate knowledge of the boats. "This is very important in winning the cup races," said Conner. "I have seen the Australians, and they make mistakes sometimes."

Match racing, one-to-one competition, is a game of the mind as well as the machine, and the strategies are intricate. On board each boat is a crew of 11, including group of three known as the "backstay" — the tactician, navigator, and mainsail trimmer — which is supposed to be the skipper's brain trust.

But when it comes to calling the shots, the split-second timing in crossing tacks closely, and squeezing every fraction of speed or lift from a slight shift of the wind, the skippers are alone. And their duel is against each other.

Bertrand, 36, the head of North Sails in Melbourne, is considered a scientific sailor while Conner, 40, a custom drapery manufacturer in San Diego, is a single-minded perfectionist with keen instincts developed from his hours of sailing.

Bertrand, a mechanical engineer who did post-graduate work in ocean engineering at the Massachusetts Institute of Technology, was a world-class sailor in the Finn and Soling classes, two classes that are considerably smaller than the 12-meters. He first became involved with the America's Cup in 1970, when he crewed aboard the Australian challenger Gretel II.

Bertrand views Conner as "competent" but "not the most naturally gifted sailor in the world." But, he continues, it requires many talents to be a top helmsman, and natural ability is only one of them. Another key is organization, and, according to Bertrand, that is Conner's strength.

Conner is the organization man of sailing. In his 1980 campaign he raised cup competition to a new competitive level by using two boats to test sails and hulls and by practicing almost full time. This summer, such campaigns were the norm.

Conner is a hard driver, competitive sailing is a passion. His philosophy is contained in the title of a book called "No Excuses to Lose," written with John Rousmaniere. In it, he explains how his intense competitiveness stemmed from feeling he was not "good looking" in his youth and "never really excelled at anything."

He bought his first boat at the age of 29 and went on to win the Star Class world championship that year. His 12-meter career began in 1974 when he was a crew member aboard Mariner during the trials.

John Marshall — who as president of North Sails, a U.S. company, is Bertrand's employer — is also the sail trimmer on Liberty. Marshall believes Bertrand's strengths have already been felt in the Australia II effort.

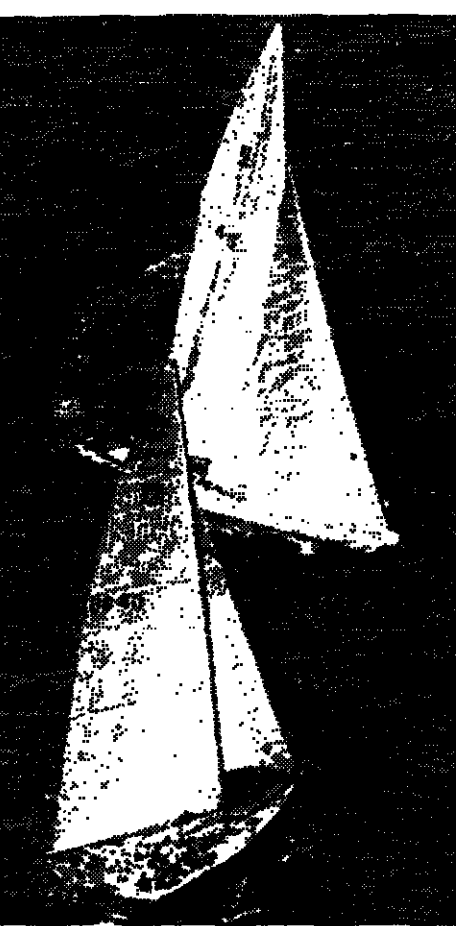
"His strength is his scientific background," said Marshall. "He deserves a lot of credit for helping to produce a very fast boat, but I would expect Dennis to be the stronger skipper."

"Dennis is a match-racing animal. John is a scientist and more intellectual. Each develops its own strengths, but if you can get on the race course with anything close to even speed, I'd go with the animal."

Marshall notes that Conner has the ability to discipline himself and sail the boat the way he thinks is right, and not become panicked by the momentary success of the other boat. Conner, he says, has a strong sense of the relative advantage of his position on the course. "He is quickly able to size up how we and the other guy are doing and do something about it," Marshall said. "He sort of sails both boats mentally, like playing both players' moves in a game of chess, but he's playing several moves ahead."

Bertrand said that strategy then becomes the "result of a lot of experience, being able to react in various ways and having all the counter maneuvers at your fingertips."

As Marshall sees it, Conner's advantage will be his "killer instinct," which he describes as the instinct of a one-on-one player, a boxer or match racer who knows he is dealing with a single opponent.



Liberty (fore) and Australia II tested each other Tuesday before the start of the America's Cup finals was delayed.

Liberty Takes Lead At America's Cup

The Associated Press

NEWPORT, Rhode Island — Liberty and skipper Dennis Conner outsailed Australia II and its winged keel Wednesday, winning the first race in the 25th defense of the America's Cup as the challenger suddenly lost speed on the final turn.

It was the race anticipated all summer, and despite the final margin of 1 minute, 10 seconds, for much of the afternoon it was one of the most intense battles in Cup history.

The race was decided heading for the sixth and final leg of the 24.3-mile (40-kilometer) course.

The two boats were engaged in a fierce gybing duel, with Liberty ahead at the fifth mark, when Australia II veered off and stopped almost dead in the water as her crew struggled to drop the spinnaker for the race to the finish.

By the time the Aussies recovered, Conner was 35 seconds ahead, too much for Australian skipper John Bertrand to make up over the last 4.05 miles.

But with the next race in the best-of-seven series scheduled Thursday, there still is no definitive answer to the question that has preoccupied the summer: Will the

winged keel be enough of an advantage for the Australians to break the 132-year U.S. monopoly.

On the first day at least, the answer was no. The keel let the Australians turn faster, but it didn't make them sail faster. And the weather — 18-knot winds and choppy seas — worked against the keel, which operates best in 7- to 10-knot winds.

Australia II crossed the starting line three seconds in front. It stretched that to an eight-second lead after the first of six legs, and at the second mark, it led by 10 seconds.

On the third leg, where the winds were blowing across the port bow, Conner caught some of Australia II's air on the second rounding and took the lead.

The fourth leg was into the wind again. By tacking carefully and taking full advantage of wind shifts, Conner upped the lead to 28 seconds going around the fourth mark and heading downwind.

But the Australians showed boat speed of their own and caught up, only to be done in by problems changing sails just as they were getting ready for the final beat, where their keel might have proved the difference.

SPORTS BRIEFS

U.S. Group to Probe Pan Am Action

INDIANAPOLIS (UPI) — The withdrawal of 11 U.S. track and field members from the Pan American Games in Venezuela will be investigated by a commission of five top track officials, according to The Athletics Congress.

TAC, which selects the U.S. Olympic team, said Tuesday the five-member commission will meet within 30 days. The commission will interview members of the track and field Pan Am team, some of whom declined to participate in the wake of several athletes at the Games being reprimanded for using illicit drugs.

TAC spokesman Pete Cava said the investigation was partly to ensure that the U.S. Olympic track and field team would be competitive in Los Angeles next summer. Cava's organization had been criticized by the U.S. Olympic Committee in Caracas because TAC, citing budgetary reasons, did not test the athletes at the National Outdoor Championships in June. The USOC speculated that if the athletes had been tested then, they might have been better prepared for the strict Pan Am methods.

Eleven weightlifters from different countries were caught with steroids in their bodies and eight of them were stripped of their Pan Am medals during the games at Caracas.

Westphal Is Returning to NBA Suns

PHOENIX, Arizona (UPI) — The Phoenix Suns and guard Paul Westphal have agreed on a two-year contract. The Suns' general manager, Jerry Colangelo, said Tuesday that the agreement, which reportedly will guarantee Westphal \$300,000 next season, was spurred by interest expressed by other National Basketball Association teams. Westphal previously played five seasons for Phoenix before being traded to Seattle after the 1979-80 season and the New York Knicks signed him as a free agent during the 1981-82 season.

Meanwhile, Billy Paultz, a former reserve center for the San Antonio Spurs has signed a contract with the Lakers, Italy, team in the Italian Basketball League. Paultz, 35, became a free agent at the end of the 1982-83 NBA season and San Antonio club officials made no attempts to resign him.

Watkins Glen Auto Circuit to Reopen

NEW YORK (AP) — Watkins Glen auto racing circuit, which closed at the end of 1981 after financial problems, will reopen under a new corporation formed by Corning Enterprises and International Speedway Corp., the group announced Tuesday. It will be known as Watkins Glen International Inc.

John R. Sanders, the circuit's new director, said the organization would announce 1984 schedule in the near future for the circuit in upper New York state.

Kentucky Cancels Soviet Game

LEXINGTON, Kentucky (AP) — The University of Kentucky has become the fourth college to cancel an exhibition basketball game with the Soviet national team since the downing of a Korean jumbo jet by a Soviet plane.

Kentucky Athletics Director Cliff Hagan said Tuesday that the cancellation was due to current circumstances and the uncertainty of future events. "He did not mention the plane incident."

Vanderbilt and Maryland were the first to cancel games with the Soviets and the University of Oklahoma followed suit on Monday. But officials at the University of Kansas said they would proceed with their game Nov. 16 because cancellation would not be "an appropriate response" in light of U.S. government sanctions against the Soviet Union.

Sports Notes

NEW ROCHELLE, New York (AP) — Jim McDermott, commissioner of the Metro Atlantic Athletic Conference since its inception in 1981, announced Tuesday that he will retire, effective June 30 next year. The conference is made up of Army, Fairfield, Fordham, Iona, Manhattan, St. Peter's and two new members, Holy Cross and La Salle.

LONDON (UPI) — Jack Nicklaus on Wednesday ruled himself doubtful for next month's World Match Play Championship on Epsom's Wentworth course. Nicklaus, the non-playing captain of the U.S. Ryder Cup team to meet Europe in Florida the following week, said that he would make a final decision Sept. 21.

Transition

BASEBALL — American League — CALIFORNIA — Retained Tom Fuld, shortstop.

PITTSBURGH — Signed a player development contract for the next three seasons with Nathan of the Class AA Eastern League.

KANSAS CITY — Signed Steve Horrell, forward, to a 3-year contract.

MILWAUKEE — Signed Russell Todd and Charles Harts and Anthony Smith, guard.

PHOENIX — Announced that Paul Westphal, guard, had signed in principle to a two-year contract.

SAN DIEGO — Signed Derek Smith, guard, forward, to a 3-year contract.

HOUSTON — Signed Dave Martin, guard, to a contract for next season.

ST. LOUIS — Signed Jamie Williams, star center, to a contract for next season.

Orioles Extend Lead With Doubleheader Sweep of Red Sox

Compiled by Our Staff From Dispatches

BOSTON — Rookie Bill Swagerty earned his first major-league victory in relief and Gary Roenicke belted a grand slam, leading the Baltimore Orioles to a 7-1 victory over the Boston Red Sox and a sweep of their two-night doubleheader Tuesday.

The Orioles won the first game,

7-4, as Jim Dwyer drove in three runs with a bases-loaded pinch-double with two outs in the 12th inning.

The sweep extended Baltimore's latest winning streak to five games while mathematically eliminating Boston from the American League East race. The Orioles, who have won 18 of their last 21 games, lead second-place Detroit by 5½ games.

Swagerty was summoned after starter Allan Ramirez had pulled a muscle in his left ribcage and had to leave with one out in the second inning. Making only his second appearance for Baltimore, Swagerty shut out Boston until the seventh when the Red Sox scored on Eddie Jurak's grounder to third.

In the first game, reliever Bob Stanley retired the first two batters in the 12th before Dan Ford singled and moved to third on a fluke double by Cal Ripken that never left the infield.

In Detroit, successive doubles by Larry Herndon and Lance Parrish

laid a two-run Tiger first inning and Jack Morris tossed a five-hitter as Detroit beat Cleveland, 3-2. Morris (19-10) increased his American League-leading strikeout total by four to give him 207. He also pitched a league-leading 18th complete game. Four Cleveland pitchers allowed just five hits.

In Anaheim, California, Dan Quisenberry set a major-league record with his 39th save by bailing

out Bud Black in the ninth inning as Kansas City defeated California, 4-3. Black (9-6) took a one-hitter into the ninth, but yielded two singles and Ron Jackson's home run. Quisenberry came on to get the final two batters for his 39th save, surpassing the 38 recorded by Detroit's John Miller in 1973.

A's 6, Rangers 5

In Oakland, California, Ricky Henderson stole three bases, giving him 101 steals for the season, and scored two Oakland runs as the A's beat Texas, 6-5. The A's moved ahead of the Rangers and into third place in the AL West but both teams were mathematically eliminated from the race when first-place Chicago won. Henderson, who stole 100 bases in 1980 and a major-league record 130 last year,

is the first player in major-league history to steal 100 or more in three different seasons.

Yankees 2, Brewers 1

In New York, Ken Griffey's third hit of the game, an eighth-inning single, drove home Willie Randolph with the tie-breaking run in the Yankees 2-1 victory over Milwaukee.

White Sox 5, Twins 1

In Minneapolis, Scott Fletcher collected a solo home run and an RBI single and Julio Cruz banged a two-run single as Chicago won its eighth straight, 5-1 over Minnesota. Rick Down (18-7) posted his sixth straight victory.

Blue Jays 6, Mariners 4

At Seattle, Jorge Orta capped a five-run third with a three-run homer and Willie Upshaw had two RBI to lead Toronto past the Mariners, 6-4.

Expos 5, Cubs 2

In the National League, in Chicago, Terry Francona capped a four-run first with a two-run double and reliever Bob James picked up his first major-league victory as Montreal beat the Cubs, 5-2, and regained first place in the NL East.

Pirates 6, Cardinals 0

In Pittsburgh, Rick Rhoden fired a five-hitter to help the Pirates post a 6-0 victory over St. Louis. Rhoden (11-10) struck out six in his sixth complete game of the season.

Mets 5, Phillies 1

In Philadelphia, Darryl Strawberry drove in three runs to lead New York past the Phillies, 5-1.

Reds 6, Braves 0

In Cincinnati, Mario Soto pitched a three-hitter for his third shutout as the Reds beat Atlanta, 6-0. Soto (16-12) struck out nine and walked two in his 17th complete game. He became the first Reds pitcher to win 16 since Tom Seaver in 1979. Pascual Perez (13-8) took the loss.

Dodgers 5, Astros 1

In Houston, Steve Sax drove in two runs to back the sixth pitch of Jerry Reuss (11-10) to help Los Angeles dump the Astros, 5-1.

Padres 4, Giants 3

In San Diego, Kevin McReynolds singled into the left field corner with two out in the ninth to break a 3-3 tie and lead the Padres to a 4-3 victory over San Francisco.

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Dan Quisenberry ... a record 39 saves.

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Figures 3, innings 2

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